## **EDITORIAL**

## Diabetes, religion and spirituality

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Received: 2 October 2012 / Accepted: 2 October 2012 / Published online: 7 December 2012 © Research Society for Study of Diabetes in India 2012

Diabetes is often an insidious disease that does not manifest explosively. Once identified, however, it stays like a shadow: one that can be controlled rather than be cured. Diabetes can induce a series of reactions at diagnosis, and a number of psychosocial stresses during its course [1, 2]. Management requires balancing many factors, not all under ones control. Formal resources for coping are not readily available in many countries, and more so in India [3], for which family and social support are sought [4].

Religion and spirituality are commonly employed as coping mechanisms. There have been scattered reports on religiosity and its role in diabetes mellitus [5, 6]. Similarly, relaxation response including yoga has also been studied in relation to diabetes [7-9]. The current issue of the Journal carries an interesting study on the prevalence and risk factors for pre-diabetes and diabetes among Buddhist monks in Thailand [10]. The common perception is of monks practicing a spartan lifestyle of diet, physical activity and conceivably mental peace. Conceptually, these are protective against insulin resistance and diabetes. However, the results of the study suggest that monks, at least those from the Chantaburi province of Thailand are not thus protected [10]. This brings to attention that there are many other lifestyle aspects in the etiology of diabetes and obesity.

There is a difference between spirituality and religion; 'spirituality is more individualistic and self-determined, whereas religion typically involves connections to a community with shared beliefs and rituals [11]. The principal point of distinction is that religion is rooted

G. R. Sridhar (⋈) Endocrine and Diabetes Centre, 15-12-15 Krishnanagar, Visakhapatnam 530 002, India e-mail: grsridhar@hotmail.com in an established tradition that arises out of a group of people with common beliefs and practices. Not only are many people religious, but the added stress of diabetes could lead to greater religiosity; disease is associated with uncertainty, fear, loss of control and discouragement.

The relation between religion and health has been one of 'blow hot, blow cold.' When scientific medicine took centre-stage, spirituality was eased to the periphery. For some time, religion was discussed in terms of being a hindrance to medical treatment [12].

It is now being increasingly realized that with non-communicable diseases on the rise, the biomedical model of disease must be expanded to a biopsychosocial model [13]; spirituality and religion are integral to the well being of a person and need to be incorporated as per individual need [14]. When self-management is a crucial component of management, it is important to understand how compliance can be improved by focussing on health behaviours and beliefs, of which spirituality is an integral aspect for most people [15]. Research on health and religion attempts to incorporate social, environmental and behavioural aspects to prevent disease [11], reflecting the broad concept of health as being a state of complete physical, mental and social well being, and not merely the absence of disease.

The diagnosis of diabetes is fraught with emotional, physical and financial stresses. The person goes through a variety of psychological reactions including denial, anger, depression and finally acceptance [16]. Among coping strategies, spirituality was utilized along with diet, exercise and medication in both western and Asian countries [15, 17]. Currently, rather than trying to establish a 'diabetic personality' [18] healthcare system is looking for ways to utilize methods to help and improve compliance to healthy lifestyle, including spirituality where appropriate [19]. A recent study described the mechanisms by which religion influences one's response to diabetes [20]. A convenience sample

of 247 subjects with type 2 diabetes mellitus was chosen from local churches, clinics, a diabetes support group and a diabetes education class. Religious coping and social support were shown to be effective in acceptance of diabetes and in selfcare behaviour. Incorporating religiosity and religious coping with other psychosocial support strategies offers a comprehensive approach to integrating diabetes in ones' life [21]. There has been one Indian study on the way spirituality and religion were employed as coping methods in subjects with diabetes mellitus [22]. Among a sample of 51 subjects with diabetes (18 men, mean age 52.0 years, 33 women, mean age 53.8 years, duration of diabetes 7.3 years [men], 5.6 years [women]a 14 item religiosity scale was administered. Both men and women sought spousal in adherence to diet, while women believed that religion and faith could help in glycemic control [22]. On the contrary, education might aid in correcting myths or wrong-beliefs in managing diabetes [23].

The practice of fasting during the month of Ramadan brings to focus the need for aligning medical safety with religious beliefs. A number of guidelines have been developed for this area [10, 24, 25]

The relation between religion and disease might be attributed to lifestyle habits promoted by religious practices and not merely by adhering to a specific religion [26, 27]. In persons with a religious outlook, physicians can incorporate spiritual aspects into their lifestyle measures so that both compliance and well-being are addressed [20, 28]. Spirituality can be measured by Daily Spiritual Experience scale [6]; a recent study using it showed that greater spirituality was associated with lesser depression. Therefore incorporation of spiritual values may improve depression in type 2 diabetes mellitus [6]. Other measures are available, for example from World Health Organization such as WHOQOL-SRPB field-test instrument which consists of 32 questions. They cover quality of life aspects related to spirituality, religiousness and personal beliefs. It was developed following an extensive pilot test in 18 centres around the world, which can now be used in field trials. [Information can be obtained from Coordinator, WHOQOL SPRB Group, Department of mental Health and Substance Dependence, WHO, CH-12-1 Geneva 27, Switzerland. Further research must be performed to evaluate religious coping with other coping methods as well as with clinical and biochemical outcomes [20]. Religion and spirituality may be incorporated in many ways to improve clinical outcomes: some reports suggest that it may help in the management of depression associated with diabetes [6]. Or it may be employed to improve lifestyle habits [29] and prevent the adverse outcomes of diabetes. The beneficial effects may be observed indirectly: for example in a study evaluating the outcomes of subjects with diabetes who were using only indigenous medicines, it was found that although biochemical outcomes were poor [30], those who were using indigenous medicines were more likely to be following diet and exercise, and more likely to have a comprehensive biochemical evaluation compared to those who did not. In other words, they appeared to be more keen to get their glycemia under control and were hence employing what to them appeared to be 'natural or neutral' methods of treatment. One could use that information to further educate them and offer them effective therapy that could truly get the glucose levels down.

How does one then place the results of the Thai monks published in the current issue of the Journal? The report shows that there is a complex relation among spirituality and the realities of daily living. Although in theory, monks reflect religious and spiritual practices personified, there is more to monkhood than just spirituality. Patterns of lifestyle as reflected in physical activity, both at the place of residence and that required to procure food provided by the general public could be modifying factors in the prevalence of impaired glucose tolerance and diabetes. In addition the quantity and quality of offered food, over which the recipient has no control, could also have made a difference. Together, the monks are obliged to remain so only for a pre-defined term which could also influence the findings. It is possible that those who embrace a life of ascetism out of choice may have a different pattern of physical manifestations. One is also unaware of the traits, phenotype and psychological status of the Thai monks before they joined the monastery; in addition their attitude to the prevalent lifestyle is also unknown. These may also contribute to the findings reported in the study. According to an online write-up, being a monk is a pretty disciplined lifestyle [31]: they are expected to wake up at four in the morning and meditate for an hour, followed by another hour of chanting. They then walk around the neighbourhood while the local people offer them food. Returning to the temple, they have a community breakfast. Before noon, some take a light lunch, which is the last solid food allowed for the day. Obviously there are other aspects over which they have little control, such as the kind of food that is offered by the local people, and which they are obliged to eat. The authors wisely commented that people must be educated to offer the monks healthy food, because that is all they will have to survive on [10]. In addition, the duration for which monks continue in the monastery is also variable, which could have contributed to the scatter of results.

Thus, it shows that spirituality and religion cannot be forced or utilized as a prescription unlike an antidiabetic drug and expect it to make a difference in ones' health. There are certain aspects of lifestyle even among monks that could affect the opportunity and ability to be physically active, to obtain food and perhaps also influence ones ability to adjust to forced ascetism that may all impact the manifestation of diabetes and impaired glucose tolerance. It is not



to take away from the ability of religion to be incorporated in lifestyle and cultural milieu to aid in the management and prevention of diabetes. However, this suggests that many layers of complexity overlay even in as homogenous a state of living as monkhood.

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