Psycho-Social Behaviour and Health Benefits of Islamic Fasting During the Month of Ramadan

Ahmad S1*, Goel K1, Maroof KA2, Goel P1, Arif M4, Amir M and Abid M

1Department of Medical Sociology, Subharti Medical College, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India
2Department of Community Medicine, University College of Medical Sciences, New Delhi, India
3Department of Biochemistry, Subharti Medical College, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India
4Sardar Patel Subharti Law College, Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India
5Swami Vivekanand Subharti University, Meerut, Uttar Pradesh, India

Abstract

A review of research articles on Ramadan fasting indicates that fasting can serve as an excellent research model for Psycho-social behaviour and health studies. The purpose of fasting for Muslims is to learn self-restraint from indulgence in everyday pleasures, for self-discipline, to develop God-consciousness, to develop self-control, to purify the body, and to empathize with the poor and hungry. Muslims describe a feeling of inner peace and tranquillity. This involves restraining anger, doing good deeds, exercising personal discipline, and preparing one to serve as a good Muslim and a good person. One of the greatest advantages of fasting is that its true observance inculcates in a person a habit of speaking the truth. Fasting is a powerful therapeutic process that can help people recover from mild to severe health conditions.

Keywords: Ramadan fasting; Spiritual; Psycho-social; Health

Introduction

Ramadan fasting is an Islamic religious fast strictly observed every year throughout the world during the month of Islamic calendar for about 30 days. In Islam, fasting for a month is an obligatory practice during the holy month of Ramadan, from dawn, until the dusk. They are advised to be away from foods or water for the whole day, to stay away from sex, misconduct and also from consuming medicines, nutritional fluids and addictions etc.

Ramadan fasting is obligatory for the healthy adult but, when fasting might significantly affect the health of the fasting individual or when one is genuinely sick, Islam exempts him or her from fasting. "God intends every facility for you; he does not want to put you into difficulties". It is ordered in Qur’an that “O you who believe! Fasting is prescribed to you as it was prescribed to those before you so that you can learn Taqwa (good deeds and God-consciousness).”[1].

Healthy adult Muslims should not fear becoming weak by fasting, but instead it should improve their health and stamina. In 1994, the first International Congress on “Health and Ramadan”, held in Casablanca, about 50 research articles presented on the medical ethics of fasting from the all over the world. It was suggested that Ramadan fasting would be an ideal recommendation for the treatment of mild to moderate diseases such as Non-insulin dependent diabetes, essential hypertension, weight management, and for rest of the digestive tract

The basic objectives of this month long process are to mould the behaviour and pattern of life of its practitioners in such a way that they turn out to be ideal human beings. In order to achieve this one has to restrain oneself from listening, speaking, hearing or thinking bad about others. The impact of this purification process is expected to last the remaining months, after which the process is repeated.

Psychological effects of Ramadan fasting

Psychological effects of Ramadan fasting are also well observed by the description of people who fast. The Holy Qur’an is a great source of guidance to humanity and nothing in it is without the objective of benefits.

Muslims believe that fasting is more than abstaining from food and drink. Fasting also includes abstaining from any falsehood in speech and action, abstaining from any ignorant and indecent speech, and from arguing, fighting, and having lustful thoughts. Therefore, fasting strengthens control of impulses and helps develop good behaviour. This purification of body and soul harmonizes the inner and outer spheres of an individual. Muslims aim to improve their body by reducing food intake and maintaining a healthier lifestyle. Overindulgence in food is discouraged and eating only enough to silence the pain of hunger is encouraged. Muslims believe they should be active, tending to all their commitments and never falling short of any duty.

Fasting is believed to help promote chastity and humility and prevent sin, the outburst of uncontrolled lusts and desires and far-fetched hopes. Fasting also includes abstaining from any falsehood in speech and action, abstaining from any ignorant and indecent speech, and from arguing, fighting, and having lustful thoughts. Therefore, fasting strengthens control of impulses and helps to develop good behaviour. During the sacred month of Ramadan, believers strive to purify body and soul and increase their good deeds. This purification of body and soul harmonizes the inner and outer spheres of an individual. On a moral level, believers strive to attain the most virtuous characteristics and apply them to their daily situations. They try to show compassion, generosity and mercy to others, exercise patience,
and control their anger. In essence, Muslims are trying to improve what they believe to be good moral character and habits.

Muslims do prayer as namaz/salat five times a day and 20 extra namaz of "Tahveeh" in the night. There is a beneficial effect of extra prayer. This not only helps with better utilization of food but also helps in energy output and it is also beneficial for extra calorie utilization. Muslims encouraged being doing more acts of piety, prayers, charity or reading Qur'an. Recitation of the Qur'an not only produces a tranquility of heart and mind, but improves the memory.

Muslims describe a feeling of inner peace and tranquillity. This involves restraining anger, doing good deeds, exercising personal discipline, and preparing one to serve as a good Muslim and a good person. It serves as a means to sharpen our awareness of God and gives strength, and self-control. Besides abstaining from food and drinks, fasting involves getting into sublime states of mind in order to develop positive feelings. In an investigation in Jordan, a significant reduction of Para-suicidal cases was noted during the month of Ramadan [3].

Social effects of ramadan fasting

Ramadan fasting encompasses direction to develop spiritual, moral and social values. It is the message of equality amongst the individuals of the society. The poor are given attention and benefit from charity and the faithful practice of the concept of neighbourhood and hospitality. Apart from helping to achieve purity of body and soul through this process of self-purification, addressing these areas of social significance is bound to help people shed all those things which are not socially desirable. The practice of the concept of neighbourhood is equally important. The neighbourhood concept ultimately extends to the world and beyond.

Muslims cannot consume alcohol and use smoke in any form during the month of Ramadan. Those people who are addicted to such habits, it is the best time for them to quit these habits, which are spoiling their health and wasting their money. Since they are restraining themselves from these habits for one month, they should continue to do so, for the rest of their life.

In the United Kingdom, the Ramadan model has been used by various health departments and organizations to reduce cigarette smoking among the masses, especially among Africans and Asians [4].

Fasting has been made obligatory in order to establish equality between the rich and the poor; the rich experience the pangs of hunger and thus fulfill their obligations with respect to the poor. One of the greatest advantages of fasting in this month is that its true observance inculcates in a person a habit of speaking the truth. Ramadan fasting is actually an exercise in self-discipline. For those who are chain smokers, or nibble food constantly, or drink coffee every hour, it is a good way to break the habit, hoping that the effect will continue after the month is over.

Fasting is prescribed by many religions of the world. Islam specifically outlines one full month of fasting during the month of Ramadan. It is a physiological, psychological as well as a spiritual experience. It is generally accepted that a reward for the self-discipline of fasting is better health [5].

Health benefits of Ramadan Fasting

Ramadan fasting can be good for one’s health and personal development. Muslims do not fast because of medical benefits which are of a secondary nature, but the health benefits of fasting are important issues. Islamic law is very clear about the exemption from fasting for the children below the age of 12 years, sick, travelling, elderly, the women who are menstruating, breastfeeding and pregnant, and those unable to understand the purpose of fasting during Ramadan. They are allowed to refrain from fasting for one day to onwards depending on the conditions of their illness. Young children and those with unsound mental faculties are completely exempted from fasting and also exempted from compensating for the lost fasting days for as long as they remain in these states [6,7].

Ramadan focused patient education should focus on pre-Ramadan evaluation, risk stratification, and reminder about the generous religious exemptions available for deserving individuals. Those who are medically fit to fast need to be educated about the importance of balanced nutritious diet, moderate physical exercise, adherence to the advised drugs and medications, self-monitoring of their glycemic status, early recognition of dangerous situations, and the necessary remedial measures.

Review of available medical literature indicates that fasting in Ramadan is safe and probably beneficial with proper education and good management for the majority of persons suffering from diabetes. Healthy stable and well informed type-1 diabetes are also able to fast safely [8].

Digestive system

Fasting is obligatory for all healthy adult Muslims during Ramadan. The study conducted by Iraki et al. suggested that during Ramadan fasting increased gastric acidity is often noticed, exhibiting itself with symptoms such as a burning feeling and heaviness in the stomach and a sour mouth [9].

The body immediate need at the times of Iftar is to get easily available energy sources in form of glucose for every living cell, particularly the brain and nerve system. A balance diet improves blood cholesterol, reduces gastric acidity, prevents constipation and other digestive problems and contributes to an active and healthy life style.

Total fasting reduces or eliminates excess hunger and rapid weight loss. A study conducted by Sulimani suggested that health problems can emerge as a result of a excess food intake, foods that make the diet unbalanced and insufficient sleep [10].

In 1975, Cott [11], in his book "Fasting as a Way of life" noted that “fasting brings a wholesome physiological rest for the digestive tract and central nervous system and normalizes metabolism.”

The findings of Ramadan fasting among Muslims and similar limited energy intake situations among non-Muslims suggest that a high-fat diet around 36 percent of energy through fat, which includes poly-unsaturated fat, may be beneficial in preventing elevation of blood cholesterol or uric acid level and better retention of protein in the body [12].

Effect of Ramadan Fasting on Body Weight and Blood Cholesterol

One of the major problems that contribute to conflicting results on the effect of quantity or quality of dietary fat on blood cholesterol level is a failure to examine the effect of dietary fat in relation to body weight or changes in body weight. There is an increase in blood cholesterol levels with increasing or decreasing weight from normal weight levels.

A study from Jordan showed that in 60 healthy Muslim volunteers, that body weight decreased significantly at the end of fasting, while there was no effect on cortisol, testosterone, electrolytes, cholesterol
or triglycerides. In this study blood glucose increased slightly. Athar et al. [13] from Iran continued these findings showing that in the first half of Ramadan, there was a decrease in body weight. However, it became steady during the second half. He also showed that serum glucose decreased in the first ten days but slightly increased at the end and reached the pre-Ramadan level [13]. It has also been reported that overweight persons lose more weight than normal or underweight subjects. In normal non-diabetic individuals, an average weight loss of 1.7-3.8 kg has been reported in different studies, the loss being greater in overweight persons [14].

Hallak and Nomani [14] noted increased blood cholesterol level with weight loss during the fasting month of Ramadan in their study [15].

In one study that was over-represented by females, no change in body weight was seen [16].

Pregnant and lactating women need for energy and nutrients are more critical than the needs of men. There is a possibility of health complications to the pregnant and lactating women and the fetus or the lactating mothers, if energy and nutrients requirement are not met during the Ramadan fasting [17].

Nomani et al. revealed that among non-Muslim American female subjects there was increase in blood cholesterol level with lowering of the body mass-index below 18.5 [18].

Maislos et al. suggested that when no significant difference was noticed in blood cholesterol levels, before and after fasting period, there was no significant difference in body weight as well, during the Ramadan. A slight increase/decrease in the total cholesterol levels, an increase in HDL-cholesterol, but no appreciable effects on triglycerides and LDL-cholesterol levels were observed [19].

Other studies show Ramadan fasting induces a marked increase in high-density lipoprotein cholesterol and decrease in low-density lipoprotein cholesterol [20].

Its observance involves abstinence from eating and drinking from dawn until sunset during the entire holy month. The effects of Ramadan fasting on body physiology as well as on the different biochemical, hematological, and metabolic parameters are reviewed. Metabolic changes, when present, are mild and reversible. The effects of fasting on diabetes mellitus, treatment with non-steroidal anti-inflammatory agents, and anticoagulation therapy are discussed [21].

Diabetes mellitus

In normal individuals, there is a slight fall in average blood glucose levels in the first few days of Ramadan fasting followed by normalization by about the 20th day, and a relatively slight increase subsequently, but all these variations are well within the normal physiological range [21].

In properly educated, well-informed and motivated persons with diabetes, under good medical supervision, no significant aberrations in their blood glucose values were reported during Ramadan fasting. However, some of the diabetics who fasted during Ramadan experienced variations in their blood glucose values depending upon the type, composition, and quantity of food consumed, regularity in medicine taking, alterations in daily physical activities or occasional binge eating after the breaking of the fast [22].

In diabetics who fasted during Ramadan, some reports have shown no change, or a decrease, or even a slight increase in body weights perhaps due to the variations in the life style changes practiced by these persons especially in regard to quality and quantity of food intake and the level of physical activities [23].

In another study, HbA1c, serum fructosamine level, insulin, and C-peptide levels did not show any significant changes during or soon after Ramadan fasting [24].

In well-informed and motivated diabetics, total daily caloric intake showed a slight decrease during the Ramadan fasting [25].

Possible major metabolic risks associated with Ramadan fasting for people with uncontrolled diabetes include hypoglycemia, hyperglycemia with or without the risk of impending ketosis, dehydration, and thrombosis [26].

Hyperglycemia can occur in persons who are negligent about their medications and indulge in over-eating in the hours after or before the stipulated fasting period. Normally, the plasma glucose level fluctuates in a very narrow range. In the prandial state the plasma glucose level rises which is promptly sensed by the pancreas and results in an increase in insulin secretion, suppression of glucagon secretion, a decrease in hepatic glucose output, and an increase in the peripheral glucose utilization and its storage. In diabetics, there is a loss of the first phase insulin secretion and an increase in the pro-insulin and split pro-insulin levels resulting in an increase in free fatty acids and triglyceride levels. Glucagon levels remain high and the hepatic glucose output is also not suppressed appropriately. All these result in post-prandial hyperglycemia. Even isolated post-prandial hyperglycemia is known to increase the risk of fatal cardiovascular disease.

Regular checking of blood glucose

Checking blood glucose through finger prick does not invalidate fasting state. So patients are encouraged to check blood glucose periodically. If blood sugar levels are low and patient experiencing signs/symptoms of hypoglycemia, it is advisable that fast is broken immediately.

Conclusion

Fasting in the month of Ramadan is ordained on the Muslim believers. Ramadan fasting has not only been spiritually beneficial but it has physical, psychological, social and health benefits.

Ramadan is a month of self regulation, process of self purification, truthfulness and self trainings with the hope that this training will last beyond the end of Ramadan. One advantage of fasting is that the poor are given attention and benefits from charity and the faithful practice of the concept of neighbourhood and hospitality.

The physiological effect of fasting includes lowering of blood sugar, lowering of cholesterol and lowering of the systolic blood pressure. In fact, Ramadan fasting would be an ideal recommendation for treatment of mild to moderate, stable, non-insulin diabetes, obesity and essential hypertension. Fasting is powerful therapeutic processes that can help people recover from mild to severe health conditions. Our body has a self healing power, in order to activate this power, the stomach must be kept empty, if Ramadan fasting is done properly it can help to recover from most diseases. If persons take care about their dietary patterns, avoid addictions, speak the truth, practice the concept of neighbourhood and hospitality and give charity as prescribed, do regular prayers, they will not only become an ideal human beings, but will certainly be also entitled for God’s blessing and protection which all of us so desperately need.
References