

Evaluation of Knowledge, Attitude and Practice of Transcendental Meditation in Pregnant Women

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ABSTRACT- Background: Transcendental Meditation (TM) promotes a state of relaxation. It has been reported in *vedic* literature that practicing TM during pregnancy has health benefits. There is a paucity of data regarding use of TM by pregnant women.

Methods: This was a prospective, cross-sectional, observational, questionnaire-based study conducted in 100 antenatal women attending private nursing homes for their antenatal care.

Results: Among the respondents, 32% were aware of TM and 22% practiced it during their current pregnancy, 15% practised it under a TM instructor. The time schedule followed by respondents was as follows, 15 women practised it for 20 min a day, 3 practised for 10 min a day, rest didn't follow the schedule. Thirty percent respondents felt that TM was based on scientific evidence, while 25% felt it was safer than other relaxation techniques that is significantly more in women educated up-to or more than 12th std. Twenty-five percent opined that TM is more efficacious than other relaxation techniques which is significantly more in working women. Relaxation of body and mind, easy to practice, were the most common advantages of practising TM during pregnancy. The main source of information about TM was internet and social media.

Conclusion: Awareness about TM is less and so is the practice in the pregnant women. The importance of practising TM during pregnancy needs to be addressed. This will help the mothers to have healthy pregnancy and out-come.

Key-words- Antenatal women, Questionnaire based study, Relaxation techniques, Transcendental Meditation (TM)

INTRODUCTION

Ayurveda (Science of Life) is the comprehensive, natural health care system that originated in the ancient *Vedic* times in India ^[1]. According to *Vedic* science the true purpose of meditation is to connect oneself to one's deepest inner self. Techniques which achieve that goal serve the true purpose of meditation.

According to Ayurveda the human body constitutes of three components, with their associated functions:

Physical body- Sthula sarira-gross body

Inner faculty- The Inner faculty is the working consciousness, which is constantly changing and consists of:

Mind- Processes sensory perceptions; has the quality of duality, as seen in pairs of opposites, for example, pleasure and pain, good and bad, hot, and cold etc.

Intellect- Analyses, discriminates, decides, and judges

Ego- self - esteem, self-conceit



Chitta- The storehouse of all memories and impressions of life

Deep inner self- The non-changing pure consciousness, which has the quality of unity and witnesses the activity of the inner faculty. The deep inner self is the source of all knowledge, intelligence, creativity, and all natural laws that govern existence.

According to *Vedic* science, the deep inner self activates the inner faculty (working consciousness), which in turn activates the physical body. A feedback loop is provided by meditation, in which a conscious connection is made with the deep inner self.

Meditation is one of the modalities of this age old science which has been described in the *Vedic* texts ^[2-5]. Transcendental Meditation (TM) is a procedure for

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avoiding distracting thoughts and promoting a state of relaxation. The person practicing TM sits in a comfortable position with eyes closed and silently repeats a mantra by sitting quietly in a chair for 15 to 20 minutes twice a day. A mantra is a meaningless sound from the *Vedic* tradition. While practising TM, the ordinary thinking process is “transcended.” It’s replaced by a state of pure consciousness. In this state, the meditator achieves perfect stillness, rest, stability, order, and a complete absence of mental boundaries. Practicing TM under supervision of TM teacher is essential for achieving good results [6].

In modern era meditation refers to a large number of diverse techniques, which work at different levels such as the senses, mind, intellect, and emotions. Some techniques are easy to learn and practice, while others are more difficult and can result in participants giving up the practice rather quickly. The benefits of meditation like control of stress, maintenance of blood pressure, reduction of anxiety has been reported in literature [1,7-14].

It is very important for the pregnant lady to balance personal, physical and mental happiness. Mothers who have high levels of stress or anxiety during pregnancy can also have a negative impact on the foetus [15]. It has been reported in literature that practicing meditation during pregnancy has certain health benefits like it helps in reduction of stress and increased blood pressure. It also keeps the mind calm and relaxed and thus leads to healthy pregnancy and outcome [16-18].

Since, very few studies of TM practices have been reported in literature, there is a paucity of data regarding the acceptance and perception of TM by pregnant mothers. With this view this study was carried out to recognise the knowledge, attitude and practises of TM practices among the ante-natal women.

MATERIALS AND METHODS

This was a prospective, cross-sectional, observational, questionnaire-based study conducted in 100 antenatal women attending private nursing homes for their antenatal care. The study was carried out for a period of 6 months from January to June 2016. Prior approval of the Ethics Committee was taken. The study instrument was a self-developed, pre-validated, semi-structured questionnaire consisting of both open and close-ended items. The questions were framed to obtain information about respondents’ knowledge, attitude and practice of TM during pregnancy along with their socio-demographic details. The questionnaire was first pretested in five participants, and suitable modifications were done accordingly. The study population included either prima- or multi-gravid, from all the three trimesters. All the participants with complications of the current pregnancy as diagnosed by their consultant gynaecologist were excluded from the study. Participants meeting the inclusion criteria were briefed about the trial and written informed consent was obtained from those willing to participate in the trial. They were explained the nature and purpose of the study. They were also informed about

their voluntary participation in the study and their concealed identity. Information was obtained by a direct face-to-face interview. Respondents were also allowed to offer their own suggestions/remarks apart from answering the questions.

STATISTICAL ANALYSIS

At the end of the study, all the data were pooled and expressed as counts and percentages. Graph pad prism software version 5.01 was used to analyze the data.

RESULTS

A total of 100 pregnant women participated in this study. The age group of the participants was from 19–40 years with a mean age of 25.5 ± 1.41 yrs. Twenty-five percent of the patients were educated below 12th standard and 75% were educated up to or above 12th standard. Total 42% were working women (Table 1). Out of 100 participants, 32 were aware of TM and 22 practiced it during their current pregnancy, 15 practised it under a TM instructor. The time schedule followed by respondents was as follows, 15 women practised it for 20 min a day, and three practised for 10 min a day, rest didn’t follow the schedule. Two of the participants had bad obstetrics history. They were not aware of the TM. The results of knowledge and practices of respondents regarding TM in relation to their demographics are presented in (Table 2). Thirty percent respondents felt that TM was based on scientific evidence, while 25% felt it was safer than other relaxation techniques that is significantly more in women educated up-to or more than 12th std. Twenty-five percent opined that TM is more efficacious than other relaxation techniques which is significantly more in working women (Table 3). Advantages of TM as stated by the respondents who were practising TM during pregnancy (n=22) is presented in table 4. Amongst the respondents who were aware of TM (n=32), the main source of information about TM was internet 10(31.25%), followed by holistic classes 8(25%), friends and relatives 6(18.75%). The other sources were television, books and treating doctors (Fig. 1).

Table 1: Demographic profile of respondents

Parameters	Respondents(n=100)
Mean age	25.5 ± 1.41 yrs
Qualification	
<12 th std	40
Up to or >12 th std	60
Occupation	
Working	42
Home wives	58
Trimester	
1 st	20
2 nd	35
3 rd	45

Table 2: Knowledge and practice of TM among the respondents

Variables	Groups	Aware of TM n(%)	Practising TM on own n(%)	Practising TM under Instructor n(%)
Qualification	<12 th std (n=25)	5(20)	1(4)	-
	>12 th std (n=75)	27(46.55)	21(28)	15(20)
Occupation	Working (n=42)	22(52.38)	13(30.95)	12(28.57)
	House-wive (n=58)	10(17.24)	9(15.51)	3(5.17)

TM- transcendental meditation

Table 3: Respondents' attitude of TM during pregnancy

Variables	Groups	Has scientific evidence (n=30)	Safer than other relaxation techniques (n=25)	Efficacious than other relaxation techniques (n=25)
Qualification	<12 th Std	11	9	5
	>12 th Std	P=0.509 19	P=0.488 16	P=0.032* 20
Occupation	Working	20	19	16
	House wives	p=0.129 10	P=0.035* 6	P=0.114 9

TM-Transcendental meditation, *Statistically significant

Table 4: Advantages of TM as stated by the respondents (n=22)

S. No	Advantages	Percentage
1.	Easy to practice during pregnancy	17
2.	Economical	20
3.	No time constraint, as can be practised any-time of the day	19
4.	The body gets more relaxed, as compared to ordinary rest or napping	20
5.	Mental relaxation	20

TM- Transcendental meditation

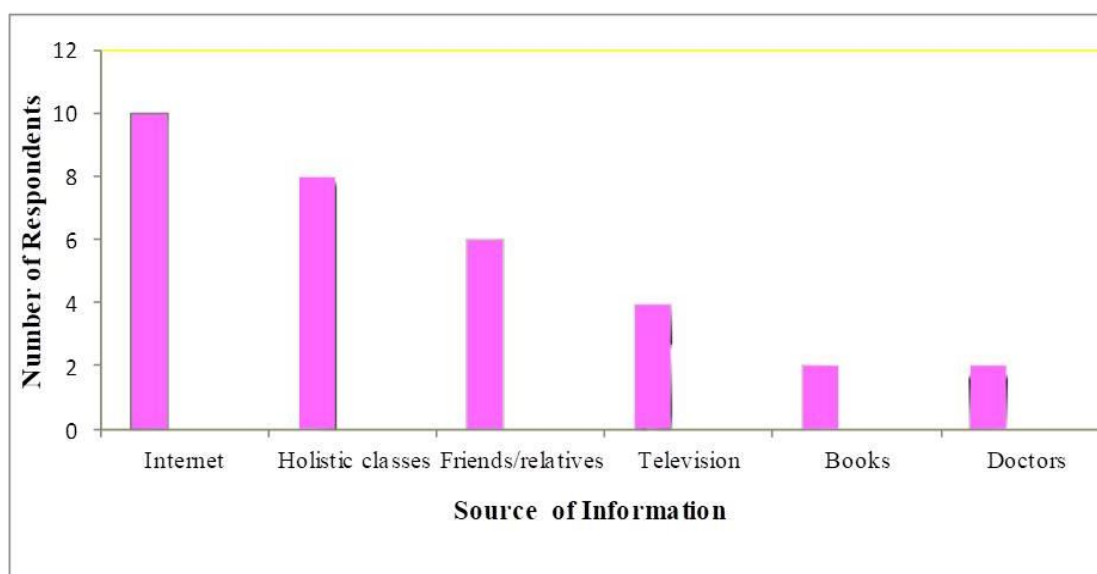


Fig. 1: Source of information of TM to the respondents

DISCUSSION

The present study explored the knowledge, attitudes and practices associated with Transcendental meditation (TM) in pregnant women. Participant's perception of TM were assessed and associated with their demographics. In the present study 32% respondents were aware of TM, while 22% practised it which is less as compared to other studies reported in literature^[15,16]. It was also found that the educational levels of the participants influenced the practice of TM during pregnancy. TM was practiced more in >12th std group as compared to <12th std group. Since the awareness of practising TM in pregnancy is very less, the carrying mothers needs to be addressed regarding inculcating practice of meditation and knowing its benefit on pregnancy and its outcome.

In the present study it was seen that the >12th std group preferred to practice under a TM instructor as compared to <12th std group. Similar findings has been reported in studies by Rebecca Douglas where it was seen that more qualified women were practising meditation regularly under a instructor^[18]. Here we can see that in both the studies the more educated group followed the practice of meditation under a guide. This issue also needs to be addressed because to practice TM, a person must be initiated by a teacher. This involves sessions of official instruction, followed by a short formal procedure performed by the teacher. Then the student learns the technique and begins practicing his mantra (the training). The mantra is selected by the teacher on the basis of the learner's personality and profession. TM is taught to new practitioners in a standardized, seven-step procedure, includes introductory lectures, a personal interview, and a two-hour instruction session^[6]. Actually, beginning meditation may be a very confusing time and many people stop simply because they do not understand the experience they are having, even though the experience is very positive and beneficial. The TM teacher assists to understand the experience and points in the right direction as needed.

In the present study the time schedule followed by respondents was as follows some women practised it for 20 min a day, some others for 10 min a day, rest didn't follow the schedule. The most favourable times to meditate are at 4 am and 4 pm. It is said that the angle between the earth and the sun is 60 degrees and that being in a sitting position at these times will balance the pituitary and pineal glands giving you maximum results^[6]. In the modern era people are unable to manage this specific time due to their busy schedule and work, therefore it is recommended any time is best time for meditation with the condition that it should be practiced every day for getting required results. For setting time alarm use of mobile clock, can be made.

In our study thirty percent respondents felt that TM was based on scientific evidence, while 25% felt it was safe and efficacious than other relaxation techniques. David W. Orme-Johnson conducted Meta analysis of 600 research papers of randomized controlled trials on safety and efficacy of TM and concluded that the TM technique produces greater reductions in anxiety than

mindfulness or other meditation and relaxation practice^[19-24]. It was reported from this meta-analysis that other relaxation techniques did not have as great an effect in reducing neuroticism or autonomic stress reactivity and did not increase frontal and central alpha EEG coherence as TM practice^[25].

Mind and body relaxation, easy to practice and economical were the advantages reported by the participants in our study. Ka Po Chan in his study in Chinese women found that prenatal meditation in pregnant women helps in spiritual empowerment and enlighten them to appreciate the meaning and value of life and give birth to a baby. He also reported that TM helps to cope with physical distress during pregnancy^[26]. Reduction of anxiety and stress was the major advantage reported by pregnant females in a study done by Maria Muzik^[27]. Carly *et al.*^[28] in their study reported that TM techniques appear to produce small yet meaningful reductions in blood pressure either as monotherapy or in conjunction with traditional pharmacotherapy.

In the present study the main source of information about TM to the participants were internet and, social media (31.25%) followed by holistic classes 8(25%), friends and relatives (18.75%). The other sources were television, books, and treating doctors. Similar findings had been reported in a study by Holger^[29] wherein majority of participant's seeked information from internet (30.6%) Books, magazines, or newspapers (41.7%) DVDs, videos, or CDs (17.8%) Television, or radio 13.6(%). More use of internet is due to easy availability and accessibility. Recently, interactive approaches, helping people practice mindfulness have appeared in the literature. Luca *et al.*^[30] assessed the effectiveness of a mobile mindfulness app when used by people in their everyday contexts and over a prolonged period of time. In their study, people could participate in the study by downloading the app from Apple's App Store as well as Google Play and by answering a mindfulness questionnaire at three pre-set times over a 4-week period. Results of their study revealed that users with no or minimal experience with meditation significantly increased their level of mindfulness. Moreover, the qualitative feedback provided by participants indicates that the app was positively perceived as beautiful and its usage elicited positive feelings in most of them.

In our study, we interviewed ante-natal mothers attending only private nursing homes, hence we could comment on perceptions and usage of TM by large sector of pregnant women attending the government set up. To conclude awareness about TM is less and so is the practice in the pregnant women. The importance of practising TM during pregnancy needs to be addressed to help the mothers to have healthy pregnancy and out-come.

CONCLUSIONS

Awareness about Transcendental Meditation is less and so is the practise in the pregnant women. Practising TM during pregnancy was perceived as safe and efficacious by more qualified women as compared to less educated women. Internet and media were the main source of

information about Transcendental Meditation. The importance of practicing TM during pregnancy needs to be addressed. This will help the mothers have a healthy pregnancy and out-come.

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