A STUDY OF EFFECT OF SPIRITUALITY AWARENESS ON STRESS MANAGEMENT IN MEDICAL STUDENTS

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ABSTRACT

BACKGROUND

The extreme stress level inherent in medical profession puts medical students at risk for both physical and psychological problems. Inability to cope up successfully with the enormous demands of Medical Education and Medical Practice may lead to cascade of consequences at both Personal and Professional level. This study focused on medical students as a preliminary attempt to identify stressors and level of stress, by Medical Student Stressor Questionnaire (MSSQ) and scoring on it. The aim of study is to evaluate spiritual awareness that can improve wellness of medical students and help them in stress management.

MATERIALS AND METHODS

This study was conducted with 2nd year M.B.B.S. students- major batch 172 students after approval of Local Ethical Committee. Pre-validated Medical Student Stressor Questionnaire (MSSQ) was used. Spirituality awareness sessions were conducted with two follow-up sessions monthly.

RESULTS

Stress level due to all stressors showed noticeable reduction after spiritual awareness sessions.

CONCLUSION

Spiritual awareness and regular practice of meditation may help in stress management.

KEY WORDS

Stress, Spiritual Awareness, Medical Student Stressor Questionnaire

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BACKGROUND

The extreme stress levels inherent in medical profession put medical student at risk for both physical and psychological problems.⁽¹⁾ Inability to cope up successfully with the enormous demands of Medical Education and Medical practice may lead to cascade of consequences at both- Personal and Professional level- influencing their effectiveness as doctors by diminishing the quality of doctor-patient relationship. One or more of such stressors might act at the same time and contribute in development of stress among medical students. Excessive amount of stress in medical training predisposes students to have difficulties in solving interpersonal conflicts, sleeping disorder, decreased attention, reduced concentration, temptation to cheat on exams, depression, loss of objectivity, increased incidence of errors, and improper behaviour, such as negligence. Stress may also manifest in the form of headaches, gastrointestinal disorders, coronary heart disease, impaired judgments, absenteeism, self-medication, suicidal ideation, depression and the consumption of drugs and alcohol.⁽²⁾ There is need to prepare future doctors for stress in medical practice.

This study was focused on medical students as preliminary attempt to identify stressors and level of stress by Medical Student Stressor questionnaire (MSSQ) and scoring on it.

MSSQ comprised of six categories of stressors i.e. ARS=Academic Related Stressor, IRS= Inter active/Inter personal related stressor, TLR= Teaching Learning related stressor, SRS= Social stressors, DRS= Drive/Desire related stressor, GARS= Group activity related stressor. (Muhmmud SBY et al 2010). This study also assesses the effectiveness of spiritual wellness for stress management by cultivating spirituality awareness. The term wellness is used to mean healthy balance of-Body, Mind and Spirit with feeling of wellbeing. Spiritual wellness is one of the area which promote self-directed efforts of life-long learning by stress management.⁽³⁾

Aims & Objectives

Aim

Spiritual awareness that can improve wellness of medical students and help them in stress management.

Objectives

1. To identify stressors and level of stress in medical students.
2. To assess effectiveness of spirituality awareness for stress management in medical students.

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MATERIALS AND METHODS**Study Type**

Descriptive.

Study Subjects

Second year M.B.B.S students of M. P. Shah Medical College, Jamnagar.

Study Duration

1 year (Feb 2017 to Feb 2018).

This study was conducted with 2nd year M.B.B.S. students – major batch 172 students after approval of Local Ethical Committee.

All students were explained about project in detail; 150 students were volunteered to identify stressors causing stress and level of stress.

Pre – validated Medical Student Stressor Questionnaire (MSSQ) was used. MSSQ consists of six hypothetical domain categories to stressors - ARS=Academic Related Stressor, IRS= Inter active/Inter personal related stressor, TLRS= Teaching Learning Related Stressor, SRS= Social Stressors, DRS= Drive/Desire Related Stressor, GARS= Group Activity Related Stressor. (Muhmmud SBY et al 2010) with 40 items (Annexure – I). Scoring scale was used to grade the level of stress.⁽⁴⁾

Spirituality awareness sessions were conducted with two follow-up sessions monthly. Sessions comprised of-

1. Spiritual wellness awareness lecture-20 min.
2. Pranayama (Breathing exercise).
3. Transcendental sitting meditation-20 min.

Immediate post-session feedback was taken (Annexure - II). Regular practice was advised. After second follow-up session spiritual experiences were assessed by Index of Core Spiritual Experiences (INSPIRIT) (Annexure -III)⁽⁵⁾ to know the spiritual awareness and wellness.

Statistical Analysis

Statistical analysis was done using the software SPSS version 21. Mean of Pre-test session and Post-test session for all the parameters were compared using Paired samples t-test. Cognitive gain was calculated as Post-test score minus Pre-test score. For all statistical evaluations, probability of value <0.05 was considered significant.

RESULTS

Level of stress	ARS %	IRS %	TLRS %	SRS %	DRS %	GARS %
Mild/No Stress	12	28	28	34	55	38
Moderate	63	55	59	54	35	45
High	24	19	13	12	08	16
Severe	01	00	00	00	02	01

Table I. Pre-Session Assessment of Stressors and Stress Level Scoring

Significant p<0.05

Shows results of stressor identification and level of stress caused by those stressors. 63% of students suffer from moderate stress and 24% high level stress by ARS. ARS was identified as the most common stressor among medical students. TLRS and IRS cause moderate level stress in 59% and 55% of students respectively. IRS was identified the second most common stressor causing high level of stress in 19% of students. Even though DRS causes Mild/no stress in maximum percentage of students i.e. 55%; it also causes severe stress in 2% of students. SRS and GARS were considered stressors causing mild stress or no stress.

Sessions	No. of Students
1st Main Session	150 (100%)
Follow Up 1 st	120 (80%)
Follow Up 2 nd	122 (81%)

Table II. Attendance of Students

In 1st and 2nd follow-up sessions attendance of students was 80% and 82% respectively. Immediate feedback questionnaire revealed that session was well conducted, and they will take out time for meditation. In 1st and 2nd follow-up sessions attendance of students was 80% and 82% respectively. Immediate feedback questionnaire revealed that session was well conducted, and they will take out time for meditation.

Spiritual Experiences	No. of Students
High	12 (10%)
Medium High	28 (23%)
Medium Low	59 (48%)
Low	23 (19%)
Total	122 (100%)

Table III. Spiritual Experiences Assessed by Inspirit

After all three sessions 48% of students had medium low spiritual experience while 10% students had high spiritual experiences

Level of stress	ARS (%)	IRS (%)	TLRS (%)	SRS (%)	DRS (%)	GARS (%)
Mild/no stress	36	52	36	48	77	57
Moderate	47	49	50	50	18	29
High	16	9	14	2	5	14
Severe	00	00	00	00	00	00

Table IV. Post Session Assessment of Stress Level with Stressors

Significant p<0.05

Post- session's assessment of stress level for all six stressors repeated to observe effect of spiritual awareness.

Level of stress	ARS (%)		IRS (%)		TLRS (%)		SRS (%)		DRS (%)		GARS (%)	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mild/no stress	12	36	28	52	28	36	34	48	55	77	38	57
Moderate	63	47	55	49	59	50	54	50	35	18	45	29
High	64	16	19	09	13	14	12	02	08	05	16	14
Severe	01	00	00	00	00	00	00	00	02	00	01	00

Table V. Comparison of Parameters of Pre and Post Session Intervention

Significant decrease i.e., from 63% to 47% observed in students having moderate level of stress with ARS. Increase in students with mild/no stress with ARS (36%) suggest positive effect of spiritual awareness. Significant effect was noticed with DRS and GARS by increase in percentage of students with mild/no stress i.e. 77% and 57% respectively. Severe stress was relieved to moderate level with DRS.

DISCUSSION

Stress is defined as an imbalance between environmental conditions necessary for survival and ability of individual to adapt those conditions.^(6,7)

Personal and environmental events that cause stress are known as stressors.⁽⁸⁾ In MSSQ stressors of medical students are grouped into six categories.

The most common stressor identified in study was Academic Related Stressor causing moderate level of stress followed by Teaching – Learning related and Inter/Intra personal related stressor. 61% of students perceived moderate level of stress findings were well correlated with Umesh et al.⁽⁶⁾ & Yusoff et al.⁽⁴⁾ These stressors followed by SRS, GARS and DRS causing moderate level of stress i.e., 54%, 45% and 35% respectively. Though DRS is causing mild/no stress in 55% of students; it causes severe stress in 2% of students and that 2% of students becomes vulnerable to drop from the course or suicidal attempts. These findings are well correlated with study by Umesh Shelke et al.

Spirituality may be a buffer to the negative effect of stressors.⁽⁹⁾ Spirituality can enhance physical and psychological wellbeing.

Index of core spiritual experiences-INSPIRIT developed by KASS and colleagues 1991⁽⁵⁾ demonstrates high internal reliability (Alpha coefficient 0.9. pre-validated). Assesses element of core spiritual experience i.e The perception of internalized relationship with GOD/ some form of Higher Power as defined by the person.^(10,11) INSPIRIT was used to assess spiritual experience after both follow-up sessions showed 10% of students with high and 48% of student with medium low spiritual experience this was correlated with study of Kabtt Zinn et al (1996).⁽¹²⁾ They have used mindfulness meditation among non-clinical subjects.

Post session stress scoring revealed significant decrease in level of stress in all stressors which was supported by the study done by Shapirio et al⁽¹⁰⁾ that denotes decrease in state of anxiety after spiritual awareness.

My Reflections

What Was Good?

1. Cooperation of students.
2. Immediate feedback was positive.
3. Attendance of students in follow-up sessions.
4. Commitment for regular practice.

What Could Have Been Different?

1. More time is required to assess the spiritual experiences.
2. Focused group feedback may improve the effect of spiritual awareness on stress management.
3. DRS and IRS could be the stressors of 1st year students.

What This Study Adds

1. ARS common stressor identified to cause moderate level of stress.
2. Spiritual awareness and regular practice of meditation can decrease stress level on medical students.

The Road Ahead

1. Spiritual awareness sessions can be the strategy for stress management and need to be included in curriculum to improve learning.
2. Further research for long period of time is required.

Implications

- Spiritual awareness sessions can be the strategy for stress management and need to be included in curriculum to improve learning.
- Further research for long period of time is required.
- Future research is encouraged to explore physiological effect of spiritual wellness to eliminate response bias.
- Spiritual awareness sessions can be incorporated into curriculum as stress management strategy.

Limitations

- This study was based on perception of students and has qualitative analysis subjective factor can affect the results.
- Control group was not available.
- Time constraint long term study is required.
- Pilot study is advisable before using pre-validated questionnaire.
- As this study was carried out in 2nd year so DRS was managed in 1st year.

CONCLUSION

- ARS followed by TLRS and IRS are common stressors identified to cause moderate level of stress.
- DRS though in less students but can cause severe stress level.
- Spiritual awareness and regular practice of meditation can reduce level of stress in medical student.
- TLRS had less effect of spiritual awareness while with IRS decrease in level of stress was observed.

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