



A Science of Medicine
The Art of Care

The Efficacy of Stress Away and Lifestyle modification in Management of Stress

Primary Researcher: Dr. Ferial De Jongh

Supervisors: Prof Rashid A Bhikha, Dr. Yumna Abrahams

September 2011

Abstract

This study which ran from early March to August 2011 aims to determine the effect of Stress Away tablets as an adaptogen to stress occurring in patients aged 8 to 67 years, male and female and from various religious and cultural backgrounds taken from both Tibb centres. It also aims to determine compliance to lifestyle modification using both lifestyle guidelines specific for temperament and those guidelines needed to bring about balance in a stressful situation. A total of 32 patients were recorded to be a part of the study, 20 were selected to be reviewed specifically for this study and 15 others were treated with no intention of their data to be used or analysed. Since stress is an imbalance that cannot be isolated to specific physical manifestations, approximately 75% of patients discussed did not know their presenting complaints were related to stress. Two main parameters, namely quality and quantity of sleep and appetite were used to determine efficacy of Stress Away either in combination with lifestyle guidelines or using lifestyle guidelines only where needed. Patients experienced varied responses to using the Stress Away at different dosages and different times used and overall found using medication easier than making the required lifestyle change. Ninety percent of patients recorded are currently not being reviewed; with the remaining 10% who touch base either by consultation or telephonically when they need to. Two patients after being referred for further psychological care are currently seeing a psychologist and life energy therapist respectively on a regular basis and are doing exceptionally well.

Keywords: stress, lifestyle modification, slebilious, adaptability.

Table of Contents:

1. Abstract.....1

2. Introduction.....3

- Brief overview of Stress Away.....3
- Aims and Objectives.....3
- Sleep.....4
- How stress affects Appetite.....5

3. Methodology and Protocol.....5

- Parameters.....6

4. Results.....7-12

- Summary of Results.....9-10
- Results as per individual temperaments.....10-12

5. Discussion.....12-13

6. Conclusion.....13

7. References.....13

Introduction

Definition of Stress, according to Britanica online encyclopedia:

Stress, in psychology and biology, any environmental or physical pressure that elicits a response from an organism. In most cases, stress promotes survival because it forces organisms to adapt to rapidly changing environmental conditions. For example, in response to unusually hot or dry weather, plants prevent the loss of water by closing microscopic pores called stomata on their leaves. However, when an organism's response to stress is inadequate or when the stress is too powerful, disease or death of an organism may result.

According to Tibb, stress is condition that is hot & dry or due to the accumulation of bilious humor. The manifestation of it, however may present itself as an imbalance with other qualities. E.g. insomnia which is cold & dry.

Brief overview of Stress Away

Temperament: Moist & Hot

Main Ingredient:

- Barcopa Monnieri
 - 136mg
 - Astringent, bitter and is cooling and is according to the June 2011 monograph reported to increase intellect, nerve tonic as well as being an anti-anxiety agent having an adaptogenic effect.
- **Uses:** see pg 66 in June 2011 monograph. Specific uses to this study to be discussed later.
- **Dosage:**
 - Tablets: General guideline: Adults: 1-2 tablets, 1-2 daily (only tablets were used)
 - Syrup: infants: ½ medicine measure 1-2 times daily, children 1 medicine measure 1-2 times daily and adults 1-2 medicine measures 1-2 times daily.

Aims and Objectives

- To determine the effect of Stress Away and lifestyle factors in the improvement of quality of life with regard to:
 - Quality of sleep
 - Appetite
 - General wellbeing
 - Compare the efficacy of the usage of Stress Away in the management of stress to lifestyle modification

Sleep

- **Benefits of sleep:**
 - Rejuvenation on cellular level
 - Adds moisture, overcomes heat and imbalances where heat is harmful.
- **Main types of Sleep**
 - NREM- Non-Rapid Eye Movement Sleep (“quiet sleep”)

REM- Rapid Eye Movement Sleep (“active sleep” or “paradoxical sleep”.)

Stages of Sleep

- **Early Stage:**
 - “Not quite asleep”:
 - hypnagogic hallucinations, e.g: feeling like you are falling or hearing someone call your name.
 - myoclonic jerk
 - Brain produces:
 - beta waves- small and fast.
 - alpha waves- slower than beta waves

5 Stages of Sleep

- **Stage 1**
 - theta waves- High amplitude, very slow brain waves.
 - 5-10 minutes
 - Transition phase between wakefulness and sleep
- **Stage 2**
 - sleep spindles (bursts of rapid, rhythmic brain wave activity)
 - +/- 20 minutes
 - Body temperature starts to decrease and heart rate begins to slow.
- **Stage 3**
 - Delta waves- slow brain waves
 - transitional phase: light sleep and a very deep sleep.
- **Stage 4**
 - Delta waves
 - Very deep sleep
 - +/- 30 minutes
 - Bedwetting and sleepwalking most likely occur.
- **Stage 5**

- Rapid eye movement (REM) sleep.
- Characterized by eye movement, increased respiration rate and increased brain activity.
- Also called paradoxical sleep: brain and other body systems become more active, muscles become more relaxed.
- Dreaming is the result of increased brain activity, but voluntary muscles become paralyzed.

(Taken from an online article called Stages of Sleep by Dr. Kendra Cherry for about.com, available online: <http://psychology.about.com/od/statesofconsciousness/a/SleepStages.htm>)

How stress affects Appetite

- Hormones involved in appetite
 - “The hormones released in response to stress seem to counteract each other. Corticotrophin-Releasing Factor (CRF) controls release of the major glucocorticoid cortisol via ACTH, stimulates the sympathetic nervous system, increases vigilance and suppresses appetite. Cortisol (a longer-lasting hormone in the bloodstream) appears to stimulate appetite, increase the activity of the OB gene, increase leptin levels in the bloodstream and yet decrease the efficacy of leptin.” (A. Tsingis, Nutritionist from Alta Bates. Com)
- Sympathetic versus Para-sympathetic Response- When persons are in stressful situations their sympathetic nervous system takes over, hence a lack of appetite. In a relaxed state, the para-sympathetic system steps in and appetite may return to normal.
- Comfort Eating- Many persons use food as a pacifier in times of stress, especially when worry is accompanied. Comfort eating can be likened to one rocking back and forth or a mother hushing a crying baby as well as the use of a pacifier (dummy).

Methodology

- Patients from both SBC and Langa Clinics were sourced either from having stress as their main complaint or having other problems that manifested as a result of stress, particularly sleep disorders and a change in eating habits.
- As far as possible, stress was addressed in the first consultation even if it was not the main complaint, as healing can take place more effectively by physis in a body that has minimal obstacles in doing so.
- Those who had more immediate health concerns to be addressed using medication, were left with at least one guideline that would increase their adaptive ability to the stress at hand and asked to return for a follow-up.
- All patients were initially put on minimum dosages of Stress Away for financial reasons as well as a personal belief that the less external medicine, even if “natural” the better. Dosages ranged from as few as 1 BD in adults to 2 TDS as well as 3 tablets at night if indicated for disturbed sleep only and the patient was already using various other meds.
- Contact time: Initial diagnosis was always made within the first consultation. Follow-ups were generally on a weekly basis by telephone or review.

Parameters

- Exclusion:
 - Patients who were on allopathic medication for mental disorders
 - Children below age 7 who are not able to swallow tablets (tablets- better availability in both clinics).
 - Ideally, no pregnant patients
- Inclusion:
 - Male and female
 - All religious and cultural backgrounds
 - Patients who presented with stress as their main complaint as well as those who had a chronic condition, particularly appetite and sleep related with stress being a causative factor in their condition.
- Quality of sleep
 - Not sleeping at all
 - Trouble falling asleep at night
 - Waking up at night
 - Disturbed sleep- dreams and snoring
 - Sleeping the usual time, but still feeling tired
- Appetite:
 - Loss of appetite
 - Increase in appetite
- General feeling of being well/ unwell
- Scale of severity: 0-5, with 5 being the most severe, 1 being least severe and 0 being resolved or absent.

Results

Pt #	Age In Yrs	Gender & Temp.	Major daily activity/ies	Stressor	Parameter	Progress as at contact sessions
1	67	F, Sang/ Phleg	Mother	Household management and caring for grandchildren (Hypertension, prediabetic)	Increased appetite and feeling anxious	1) Hx of current meds- not influential on appetite. 2) Noticeable feeling of relaxation, no difference seen in appetite. 3) Does not comfort eat due to not feeling tensed up. USED: Stress Away and Breathing Exercises st Scale: 3 (1 st consult.), 1 nd (2 nd consult.) 0 (3 rd consult)
2	63	F, Mel/ Phleg	Wrapping up deceased husband's dealings	Feeling alone Grief Anxiety (Hypt)	Waking up at night	1) Gave meds, R50 pt, 1TDS 2) Still woke up at night, but felt more relaxed. 3) Changed dosage to 2 afternoon & 2 evening- woke up less often- from 3x to 1x. 4) Had many follow up consultations for hypt, buys SA separately and uses as in 3 rd consultation. 5) Scale: 3 (1 st consult.) 1 (follow up consultations)
3	23	F, Mel/ Phleg	Trainee Accountant	Office pressures	Stiff shoulder muscles, headaches and SOB	1) Pt holds her breath when stressed- be aware of & correct habit, SA 2TDS or 3 in AM. 2) Telephone 1 wk later: Shoulders less sore, less headaches 3) Scale: 4 (1 st consult). 0 nd (2 nd consult.)
4	40	F, Phleg/ Mel	Auditor & Voluntary worker	Infertility- endometriosis (P/C)	Loss of appetite, feeling stressed	1) A female's body is the first home for a growing fetus- needs to be nurturing & eating well and being

						relaxed helps to achieve this. Purged w/ Biliopurge, Laxotab + SA 1 TDS 2) Able to eat 3 meals 3) SA 2 TDS. No further follow ups 4) Scale: 3 (1 st consult.), 0 (2 nd consult.)
5	8	M, Phleg	Learner (School)	↓ concentration Headaches, blackouts- stress related	Headaches, concentration	1) Thorough hx, ascertained that headaches caused by stress lead to blackouts. Management tools: Stretching calf muscle, rubbing ears in class and SA: 2 in AM and 1 afternoon. 2) Telephonic review 1 month later- better concentration at school, no blackout for the 2 weeks of using SA. One blackout 3 days prior to review- scan at Red Cross Children Hosp. 3) Scale: 1 (initial consult.), 0 while being on SA
6	42	F Sang/Phleg	Sales consultant, housewife	Time management, waking up at night with panic attacks	Sleep General feeling of wellbeing	1) Panic attacks occurring +/- 3x per week. Always late. Rx: ABC to do list + Sumenta 2 nocte 2) Panic attacks still the same. Feeling a lot "lighter". Sumenta O/S, SA: 2TDS or 3 at night 3) Wakes up 2-3x at night, with no feeling of anxiety. ↑ stress (work related), torso and arms feel tensed again. 4) Wakes up at night at least once to check on daughter and son. Pt using SA 3 tablets before stressful work event only and when needed only. 5) 4- initial consult. Now: 0- 1
7	53	F, Sang/ Bil	Office worker- HR	Porphyria rash + urticaria	Sleep Ability to cope with day to day tasks without feeling	Progress as at contact time. 1) Persistent tiredness (Summer, menopause, porphyria). Woke up 3-4 per night to use the toilet. Advised Urtiplex and skin

					frustrated. Initially: 4. Now: 0-1	calm after allopathic meds given- previous encounter with same problem failed to relieve urticaria. Due to condition, purging was not advised (more meds that I was not sure if safe in Porph). SA 2 BD was given to help bring about calmness. 2) Patient admitted that using the toilet was an excuse because she was already awake. Patient felt no relieve by using SA and felt as though her body is failing her. Advised: positive affirmations to liver and repeating over water. 3) Pt notes that her boss complemented her on how well she looks “the best in a long time”. Pt alludes compliment to SA because she feels like she can cope better. Still wakes up at night 1- 2x but does not use the toilet. Pt coping well with positive affirmations.
--	--	--	--	--	--	--

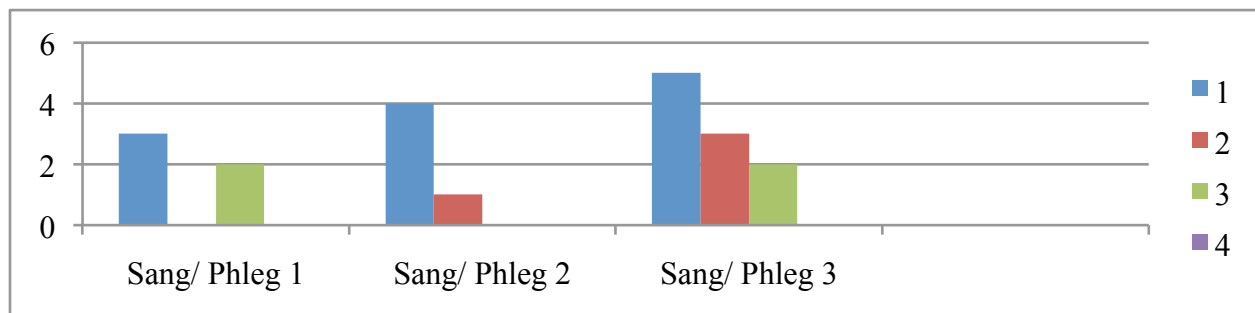
Summary of Results: Patients 8- 21

Pt #	Age in yrs	Gender & Temp.	Stressor/ complaint	Parameters	Outcome
8	37	F, Sang. Phleg	Financial problems, in process of divorce	Overeating	1) 5 2) 3 3) 2
9	64yrs	F, Phleg/ Sang	Just feels tensed all the time	Waking up at night	1) 3 2) 1
10	28	F, Mel/ Bil	Stress at work, long hours, single mother	Falling asleep at 1am	1) 5 2) 1 3) 0
11	23	F, Phleg/ Mel	Poor time management	Loss of appetite	1) 4 2) 2 3) 0
12	55	F, Phleg/ Sang	Less interest in food	Loss of appetite	1) 2 2) 1 3) 0

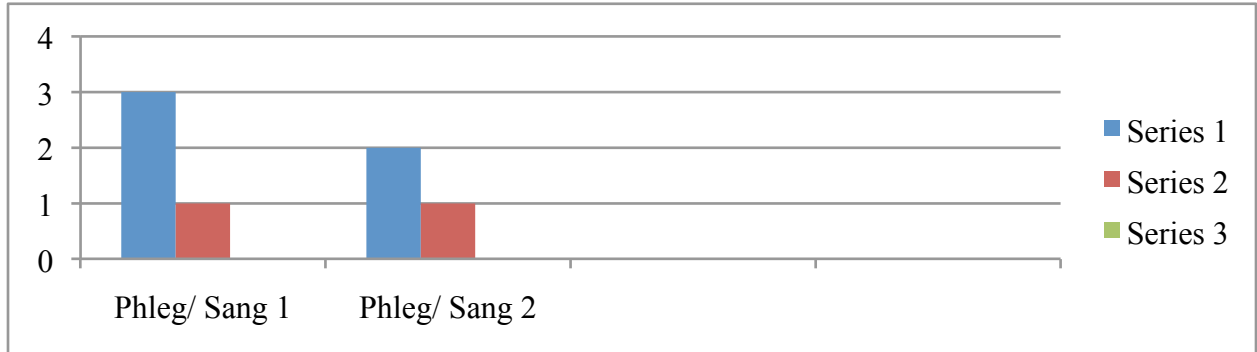
13	32	F, Phleg/ Mel	Poor time management	Oversleeping, fatigue	1) 5 2) 5 3) 3 4) 0
14	33	F, Sang/ Bil	Fatigue	Trouble falling asleep	1) 4 2) 1
15	27	F, Mel/ Bil	U have all day? ;-)	Loss of appetite	1) 3 2) 2
16	42	M, Sang/ Bil	Unemployment, son on drugs	Waking up at night	1) 3 2) 1
17	34	F, Phleg/ Mel	Break-up	Waking up at night	1) 3 2) 0
18	63	F, Mel/ Bil	Caring for teenage grandchildren	Feeling stressed	1) 4 2) 1 3) No follow-up
19	29	M, Phleg/ Mel	Prev. drug abuse	Feeling anxious, trouble sleeping	1) 4 2) 2 3) 0
20	50	M, Sang/ Bil	Constant feeling of anxiety	Loss of appetite	1) 4 2) 1 (tel. review)
21	21	Bil/ Sang	Poor concentration, Irritability	Head feeling foggy	1) 4 (relaxation techniques-breathing exercise, calf muscle technique 2) 1 Better concentration

Results as per individual temperaments

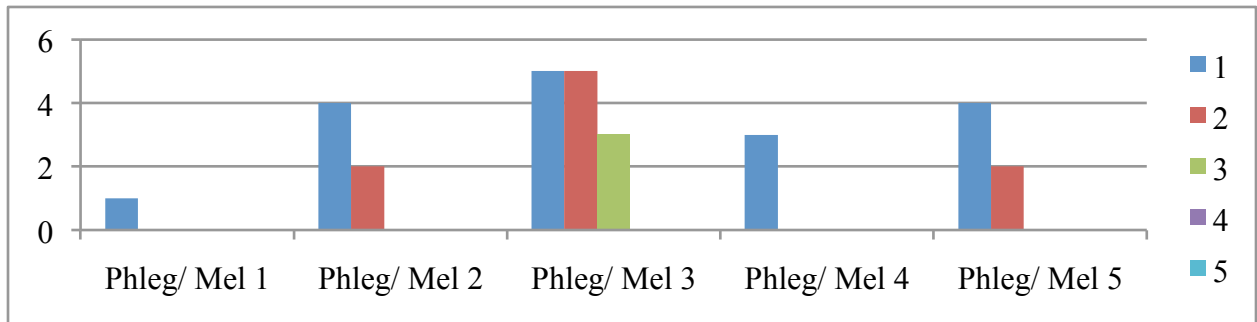
Sanguinous/ Phlegmatic (3 patients)



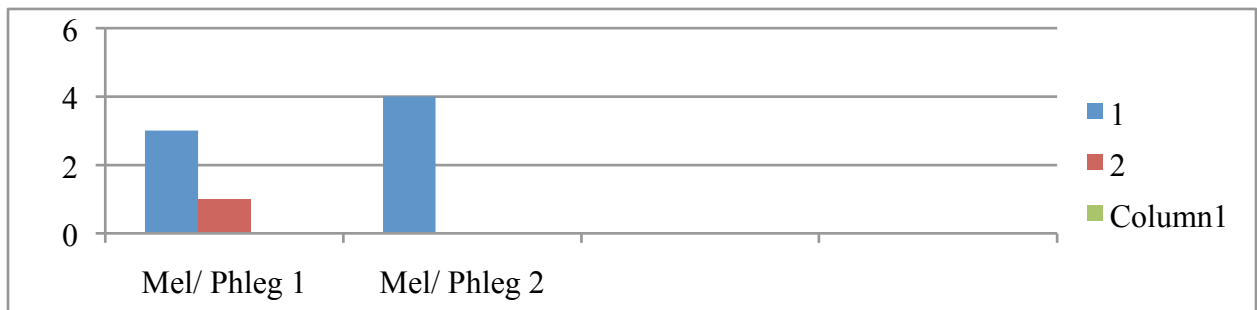
Phlegmatic/ Sanguinous (2 patients)



Phlegmatic/ Melancholic (5 patients)



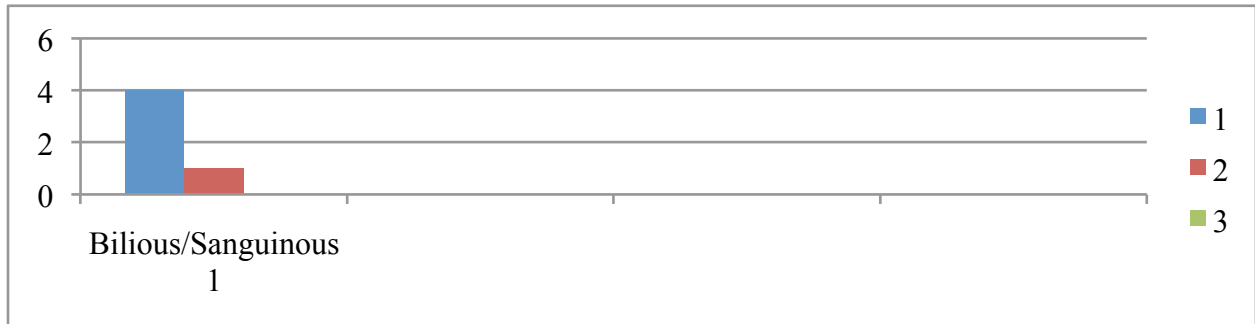
Melancholic/ Phlegmatic (2 patients)



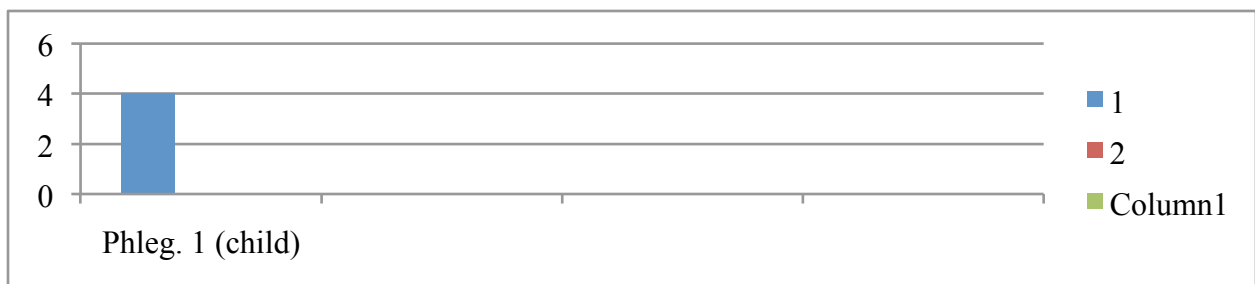
Bilious/ Melancholic

No patients

Bilious/ Sanguinous (1 patient)



Phlegmatic- child (1 patient)



Second follow up: 0

Discussion

- Many patients did not view stress as a main complaint, but were often found that stress played an integral part in the pathophysiology of the main complaint as well as an aggravating factor to physis role in healing. In cases where the main complaint was not directly related to stress, the main complaint was treated, but the patient was managed by giving him/ her at least one lifestyle change to implement until the review.
- Dosages of Stress Away were specific to each case. Generally patients were given the lowest dosage possible mainly for two reasons. That is to keep costs minimal especially when stress was not the main complaint as well as to keep the amount of medication minimal as many of the patients used for this study was also on chronic allopathic as well as other Tibb and natural medication. Patients who had sleeping problems were advised to take 3 Stress Away nocte, one hour prior to bed, with his/her stomach as empty as possible. Patients whose stress was work-related, or related to daily activities were advised to drink 2 Stress Away in the morning and 2 in the afternoon. This dosage proved to be effective in even causing a sleep that is less interrupted in patients who did not initially report sleeping disturbances and could, in my opinion be due to the

adaptogen effect of Stress Away where the body is more relaxed during the day resulting in better sleep at night as opposed to being more tensed during the day and having disturbed sleep at night.

- Generally appetite disturbances varied. In most cases phlegmatic dominant patients tended to comfort-eating in depressive states, but were observed to display the opposite when nervous or had acute bouts of tension. Stress Away alongside effective lifestyle changes showed an overall improvement in stress levels with a general feeling of being well and consequently adapted eating habits. Appetite in melancholic patients, however were not well recorded due to the fact that Melancholic persons generally have a varied appetite to food, but Stress Away and lifestyle factors did improve (increase appetite) in one patient which was directly proportionate to her report of feeling less stressed.

Conclusion

- **Stress and Temperament**
Adaptability determines physical manifestation of stress. An example of adaptability as a coping mechanism of stress is the bilious dominant patient who tends to become controlling of situations and overwork in stressful times, leading to an increase in heat and dryness which over prolonged periods can be one of the leading causes of backache (cold and dry) that have no other medical cause or traceable pathophysiology attributed to it.
- Most patients prefer tablets over lifestyle changes, simply because it is easier to take a tablet than break a habit.
- Different view on lifestyle modification guidelines.
- At SBC, lifestyle modification was well accepted, whereas at Langa clinic it was viewed as an act of caring, but not viewed as effective as medication.
- SA proved to be effective in sleeping disturbances and changes in appetite where stress was a cause.
- Stress is a condition that sometimes can be managed using lifestyle modification only, but not any form of medication only.

References

- Information on Stress Away: Tibb Practitioners Monograph, June 2011
- Stages of Sleep: <http://psychology.about.com/od/statesofconsciousness/a/SleepStages.htm>