



Awareness, prevalence and medicated and non medicated treatment of stress in Karachi, Pakistan

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ABSTRACT

The objective of the study is to analyze the treatment protocol of stress in Karachi, Pakistan. This is a survey based study of about 200 peoples of different age groups including both genders. This survey is conducted by asking different questions about awareness, prevalence, medicated and non-medicated treatment of stress. Statistical analysis shows the percentage of awareness, prevalence of stress in different age groups of both genders. It also shows the percentages of followers of medicated and non-medicated treatment. Result of this study revealed that the awareness of stress is well developed in Karachi's people and show the high rate of prevalence. The followers of non-medicated treatment (84%) are greater than followers of medicated treatment (16%). Stress is a fact of life. Every one suffered from it in daily routine. Mostly peoples did not take any medication for it only geriatric patients follow medicated treatment. Most of the peoples do not understand severity of stress, so if it persists, can lead to others pathological conditions.

Key words: stress, awareness, prevalence, treatment protocol.



INTRODUCTION

Stress is a part of life and it is a fact, our study focused on the awareness, prevalence and treatment protocol. Mostly individuals considered non medical treatment and are not taking it seriously while it may lead to several disorder "Stress occurs when peoples perceive that they cannot adequately cope with the situations or with the demands being made on them or with threats to their well-being"[1]. The term "stress" was coined by Hans Selye in 1936, and it is defined as "the non specific reaction of the body to any demand for change" [2]. Stress is the body's reaction to any change that requires an alteration or response. The body responded to these alterations with physical, mental and emotional responses. Stress is a normal element of life. Stress can be felt by your surroundings, your body and your thoughts [3]. Stress is caused by two things, primarily it is down to whether you think situations around you are valuable of anxiety and then it's down to how your body response to your thinking process. This innate stress response to sudden events is known as 'fight or flight'. Stress happens when we feel that we can't cope with pressure and this pressure comes in many kinds and forms, and trigger physiological behaviors. These changes are best described as the

fight or flight response, a harsh-strange response to perceived threats to our survival [4]. Our fight-or-flight response is our body's sympathetic nervous system reacting to stressful conditions. Our body releases large quantities of the chemicals cortisol, adrenaline and nor adrenaline, which trigger an increased heart rate, elevated muscle readiness, sweat, and alertness - all these factors help us protect ourselves in a dangerous or challenging situation. Non-essential body functions become slow, like our digestive and immune systems when we are in fight-or flight response mode. All resources can then be concentrated on rapid breathing, blood flow, alertness and muscle use [5]. Stress is of three types:

Routine stress related to the workload, family, and other daily obligations.

Stress brought about by a sudden negative alteration such as lacking of job, divorce, or diseases

Traumatic stress, which happens when you are in danger of being seriously hurt or expired. Examples are an accident, war, assault, or a natural disaster. This can cause post traumatic stress disorder (PTSD) [6]. Acute and chronic psychological stress is increasing in prevalence in

the global world nowadays. Acute stress leads to enhanced anxiety [7] and chronic and extreme stress can lead to impaired cognitive performance [8].

Sign and Symptoms: Memory problems, agitation, poor judgment, anxious, depression or feeling unhappy, eating more or less, nervous habits, aches and pains, nausea, rapid heartbeat and inability to concentration are the common sign and symptoms. [9].

The most common causes of stress are: Bereavement, Family problems, Financial matters, Illness, Job issues, Lack of time, Moving home, Relationships (including divorce) [10]. Stress is linked to all leading physical causes of death - heart disease, cancer, stroke [11]. According to a study, 57% of outpatient medical clinic providers (physicians, residents, nurse practitioners, and physician assistants) report "rarely" or "never" practicing stress reduction techniques themselves.

Those who do practice use the following:

Exercise (70%) - meditation (32%)

Imagery (26%) - deep breathing (21%)

Mindfulness (16%) - progressive muscle relaxation (16%) [12].

There are three broad methods you can follow to treat stress, they include self-help, self management and medication.

Self help for treating stress: *Exercise* - exercise has been proven to have a beneficial effect on a person's mental and physical state. For many people exercise is an extremely effective stress buster.

Division of labor - try to delegate your responsibilities at work, or share them. Otherwise you feel stressful.

Assertiveness - don't say yes to everything. If you can't do something well, or if something is not your duty, try to find ways of ignoring to do them.

Alcohol and drugs - alcohol and drugs will not help you manage your stress better. Stop consuming them completely, or reduce it.

Caffeine - if your consumption of coffee and other drinks which contain caffeine in high quantity, reduced it.

Nutrition - eat plenty of fruit and vegetables. Make sure you have a healthy and balanced diet.

Time - make sure you set aside some time each day just for yourself. Use that time to organize your life, relax, and pursue your own interests.

Breathing - there are some effective breathing techniques which will slow down your system and help you relax.

Talk - talk to your family, associates, colleagues and your boss. Share your thoughts and worries.

Seek professional help - if the stress is affecting the way you function; go and see your doctor. Heightened stress for prolonged periods can be bad for your physical and mental health.

Relaxation techniques - meditation, massage, or yoga and plenty of sleep have been known to greatly help people with stress.

Stress management techniques: Stress management can assist you to either remove or change the cause of stress, alter how you view a stressful condition, lower the impact that stress probably have on your body, and teach you alternative ways of dealing with it. Stress management therapy has the goal of pursuing one or more of these approaches. Many therapies which can assist you relax, such as aromatherapy, or reflexology, often have a beneficial effect.

Medication: Doctors will not commonly prescribe medications for handling stress, unless the patient comes with an underlying illness, such as depression or some sort of anxiety. In that case, the doctor is actually treating a mental condition. In such condition, an antidepressant may be prescribed. Note that there is a risk that all the medication will only mask the stress, rather than help you deal and overcome with it [13].

Non-medicated treatment: If anyone become stressed easily or feels anxious, it is important to learn that how to reduce or overcome these feelings. Non-medicated treatment includes exercise, massage, sleeping, meditation etc. Massage and aromatherapy can promote a sense of wellbeing and provide a relaxing environment that helps you unwind. There is little scientific evidence to show whether or not aromatherapy is an effective treatment for stress, although there is no evidence to support its use. Aromatherapy is not suitable for everyone. Some people find that other complementary therapies offer some benefit, including acupuncture, visualization, reflexology and herbal remedies. However, there isn't strong evidence to say if they are effective or not [14]. Awareness, prevalence and treatment protocol of stress is important because persistent of stress may leads to other problems and suppress the quality of life.

METHODOLOGY

It is a cross-sectional survey based study which was conducted in the different areas of Karachi such as Nazimabad, North Nazimabad, Gulshan, Federal B area and Garden. Data was collected between 3rd May and 28th July 2014. A specially designed questionnaire was used for this purpose. We have collected 200 people's data of different

age group including men and women and in the survey; we have asked questions about awareness, prevalence and medicated and non medicated treatment of stress followed by different age groups. We have statistically analyzed our results and plotted graph which shows percentage about awareness, prevalence and medicated and non-medicated treatment followed by different age groups.

RESULT

Our study revealed that 97.5% peoples are suffering from stress and they are aware of stress. Out of 200 peoples 166 peoples understand stress as a normal phenomenon or a part of life, 15 peoples understand that it is a disease state and 19 understand it as a threat to well being (table: 1). Almost 195 peoples are prevailed. About 95.38% of male patients are prevailed and 98.5% of females are prevailed (Figure: 1). about 89.06% of >20 years understand stress as a normal part of their lives, 4.68% disease and 6.25% as threat to well being. The adults of 20-40 years which understand stress as a normal part are 86.9%, disease are 5.95% and threat are 7.14%. About 69.23% of age >40 years understand stress as a normal part, 13.46% as disease and 17.30% as threat to well being (figure: 2). 84 % patients of stress are following non medicated treatment and 16 %of patients are following medicated treatment for relieving stress (figure: 3). The people having age < 20 years are about 64 out of which 62 are suffered from stress .Among them 6.25% are the followers of medicated treatment and 93.7% followed non medicated treatment (figure :4). Non medicated treatments include sleep (51 peoples), massage (4 peoples), eating food or fruits (10 peoples) and exercise (5 peoples). The people of age between 20-40 years (82peoples) out of 84 are stress patients. 85.70% supported medicated treatment and 14.28 % favored non medicated treatment (Table: 2). 60 peoples favor sleep as a non medicated treatment to get rid of stress, 4 peoples favor massage, 13 peoples favors eating and 6 peoples followed exercise and the people of age group >40years are 52, out of which 16 are

stressed patients 30.7 % followed medicated treatment and 69.23% followed non medicated treatment for reducing stress. Among these peoples 19 are the supporters of sleep therapy,2 peoples uses massage,11 peoples favors eating food & fruits and 4 peoples favors exercise as a non medicated treatment to reduce stress(table:3).

DISCUSSION

Stress is the feeling of under pressure which can be defined as when we feel that everything seems to have become too much or overloaded. Stress is simply the fact of nature. Every one suffers from stress due to different situations or problems in their lives. In this study, we have focused on the awareness, prevalence and treatment of stress. During our survey we have observed that almost all the peoples are aware of stress and they understand stress as a normal part of life. Only few peoples understand stress as a disease and threat to their lives. It was strange that only16% patients take medication to deal with stress and almost all patients are geriatric. Mostly adults adopt non-medicated treatment to deal with stress and about 130 people's taken sleep as a non- medicated therapy for reducing stress and they sleep more than their routine. It means they need to modify their lifestyle, by modifying the lifestyle peoples can reduce their stress. It has been observed that patients do not take stress as a serious condition; they take stress in free hand and do not take any medication even in chronic conditions, that's why stress increases nowadays worldwide. The most common drugs which they used are paracetamol, anti-depressants and anxiolytic more commonly alprazolam. It has also been observed that patients are using self medications. Unfortunately, peoples of Karachi are not following the treatment protocol of stress and that's why almost every person is suffering from stress. Previous studies explained that acute stress lead to many problems like anxiety while if persist chronically may lead to impairment in congenital operations. Stress can be reduced by taking medications on time given by a doctor or physician or by modifying the lifestyle.

Table 1: Awareness and prevalence of stress

Age (years)	Awareness			Prevalence	
	Normal	Disease	Threat	Yes	No
<20 (64)	57 (89.06%)	3 (4.68%)	4 (6.25%)	62(96.87%)	2(3.125%)
20-40 (84)	73(86.90%)	5 (5.95%)	6 (7.14%)	82(97.6%)	2(2.38%)
>40 (52)	36(69.23%)	7 (13.46%)	9(17.3%)	51(98.07%)	1(1.92%)

Table 2: Followers of medicated and non-medicated treatment of stress followed by different age groups

Age groups (years)	Treatment modality followed	
	Medicated (%)	Non-medicated (%)
<20	4 (6.25)	60(93.75)
20-40	12(14.28)	72(85.7)
>40	16(30.7)	36(69.23)

Table 3: Non medicated treatment followed by different age groups

NON-MEDICATED TREATMENT OF STRESS					
Age(years)	Sleep	Massage	Eating fruit	Exercise	Others
<20	51	4	10	5	0
20-40	60	4	13	6	2
>40	19	2	11	4	1

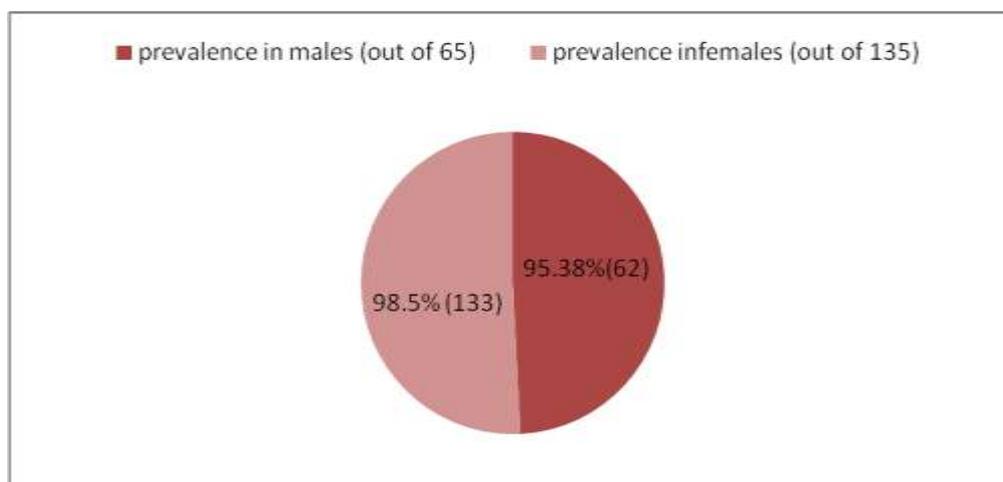


Figure 1: Prevalence

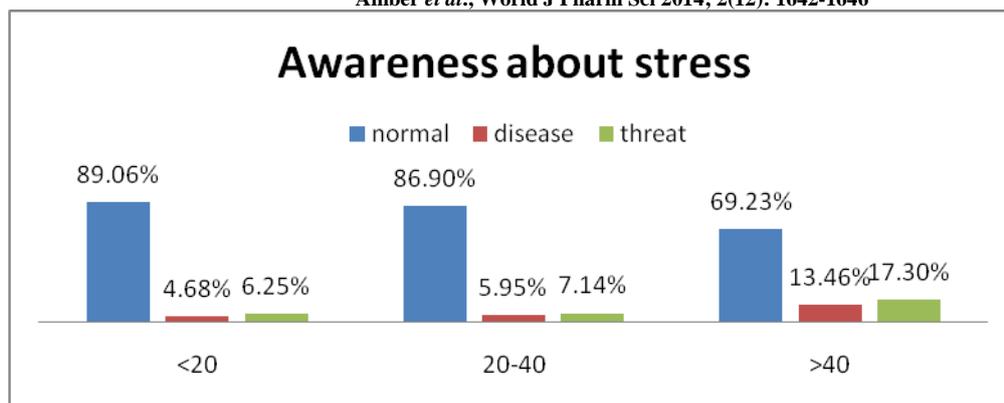


Figure 2: Awareness about stress

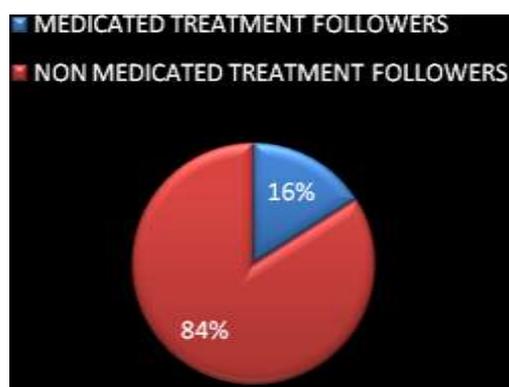


Figure 3: Followers of medicated and non-medicated treatment

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