

A STUDY TO EVALUATE THE EFFECTIVENESS OF A PLANNED TEACHING PROGRAMME (PTP) ON KNOWLEDGE ABOUT BASIC STRESS AWARENESS AMONG SIGNIFICANT INDIVIDUALS IN SELECTED FAMILIES OF A COMMUNITY IN JODHPUR, RAJASTHAN, WITH THE AIM OF DEVELOPING AN INFORMATION BOOKLET ON STRESS RELAXATION TECHNIQUES

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ABSTRACT

Background: Mental health is a critical aspect of individual well-being, with stress being a prevalent factor that can negatively impact physical and psychological health. Stress affects people differently, often leading to impaired personal relationships and productivity. In India, stress levels are particularly high, yet many individuals do not seek help due to stigma and lack of awareness. Addressing this gap, this study evaluates the effectiveness of a Planned Teaching Programme (PTP) designed to improve basic awareness of stress among significant individuals in selected families in Jodhpur, Rajasthan. **Methodology:** A pre-experimental "one-group pre-test post-test design" was used, involving 60 participants from the Rameshwar community in Jodhpur, selected through purposive sampling. Data were collected through structured surveys, and the effectiveness of the PTP was assessed using paired t-tests, comparing pre-test and post-test knowledge scores. Demographic variables and associations with knowledge levels were analyzed using chi-square tests. **Results:** The majority of participants (60%) were aged between 20 and 40 years, with 65% being male. Post-intervention, there was a significant increase in the mean knowledge score from 14.88 (pre-test) to 23.38 (post-test), with a Z value of 2.5005 ($p < 0.05$), indicating the PTP's effectiveness. However, no significant associations were found between knowledge scores and variables such as age, gender, education, or income ($p > 0.05$). **Conclusion:** The study demonstrated that the PTP significantly enhanced participants' knowledge about stress across all demographic groups. Despite the small sample size, the intervention proved effective in raising stress awareness. Future research should explore long-term knowledge retention and investigate other factors that may influence learning outcomes, such as participant motivation and mental health.

KEYWORDS: Stress awareness, Planned Teaching Programme, mental health, Jodhpur, stress management, public health education.

INTRODUCTION

Mental health is a cornerstone of individual well-being, influencing personal relationships, productivity, and one's ability to cope with adversity. A deviation from optimal mental functioning can lead to stress, manifesting in unproductive behaviours and impaired relationships. Stress, as defined by Hans Selye, is the body's nonspecific response to any demand, whether from positive or negative stimuli. Although stress is a natural part of life and can even serve as a motivator in small doses, chronic stress exhausts both the mind and

body, causing a range of health issues. Mild stress, or eustress, can be beneficial, enhancing performance and boosting immune function, but prolonged exposure to high stress levels can result in negative health consequences.^[1]

The impact of stress is highly individualized, influenced by genetic, psychological, social, and cultural factors. While moderate stress can improve heart function and recovery rates, chronic stress (distress) leads to weakened immune responses, cardiovascular problems,

and mental health disorders such as anxiety and depression. Studies have shown that stress affects individuals differently, with some displaying maladaptive behaviours or memory impairment. Chronic stress not only disrupts personal health but also strains relationships, leading to family discord and reduced workplace productivity. To measure stress, tools like the Holmes and Rahe Stress Scale, Depression Anxiety Stress Scales (DASS), and Galvanic Skin Response testing are commonly used.^[2]

The causes of stress are diverse, ranging from external factors such as employment issues, political uncertainty, and financial instability to internal family dynamics like divorce or bereavement. In the United States, surveys indicate that job pressure, money, and health are top contributors to stress, with nearly 77% of people regularly experiencing physical symptoms of stress such as headaches, muscle tension, and fatigue.^[3] Similarly, recent surveys show that India has one of the highest stress levels globally, with around 90% of its population reporting stress.^[4] Despite these alarming statistics, many individuals do not seek professional help due to cultural stigma and financial barriers, further exacerbating the mental health crisis.

Stress is a pervasive issue, with 77% of people in the U.S. regularly experiencing physical symptoms of stress and 73% experiencing psychological symptoms, according to the American Psychological Association (APA).^[5] Furthermore, 33% of individuals report living with extreme stress, while 48% report that stress keeps them awake at night.^[6] Stress levels among caregivers are particularly alarming, with caregivers reporting significantly higher levels of stress than non-caregivers. Women caregivers, in particular, are at a higher risk of health issues linked to stress, they are always or often under stress at work, and feelings of alienation from family members.^[7]

In India, the scenario is equally concerning. A survey conducted by Cigna TTK Health Insurance (2019) revealed that nearly 90% of the population suffers from stress, significantly higher than the global average of 86%. Despite this, 75% of individuals in India do not feel comfortable discussing stress with medical professionals, citing stigma and cost as major barriers.^[8] This lack of open dialogue and awareness is particularly prevalent in rural areas, where mental health resources are scarce, and stress is often misunderstood or stigmatized. The disconnect between the widespread presence of stress and the limited utilization of mental health services points to a gap in public health

interventions. In light of these alarming statistics, there is a pressing need to study how stress affects family functioning and to explore ways to alleviate its negative impact. Addressing this issue is crucial for improving both mental and physical health outcomes, particularly in disadvantaged or underserved populations where the effects of stress may be more pronounced.

The objectives of the study were

1. To assess the pre-test knowledge level regarding basic awareness of Stress among significant individuals in selected families.
2. To determine the effectiveness of Planned Teaching Programme in terms of gain in the knowledge level regarding basic awareness of stress among significant individual in selected families.
3. Post-test knowledge regarding basic awareness of stress with selected variables
4. To find out the association of knowledge regarding basic awareness of stress with selected variables.

METHODOLOGY

Research approach: Experimental research approach

Research design: Pre-experimental "One group pre-test post-test design" was adopted for the study.

Study Setting and Participants: The study was conducted in the community of Rameshwar, Basni, jodhpur.

Sampling: In this study, using purposive sampling technique 60 subjects were selected who received the individual planned teaching programme.

Data collection

Data was collected using structured knowledge questions to assess various aspects of the participants' understanding, alongside demographic questions to gather essential demographic information. This approach facilitated the evaluation of background characteristics, physical health, psychological well-being, physical symptoms, mental health status, and participants' basic awareness of stress.

Data analysis: The collected data are analyzed using descriptive and inferential statistical methods. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the demographic data and knowledge scores. The effectiveness of the Planned Teaching Programme (PTP) was assessed using the paired t-test, which compared the pre-test and post-test scores of the significant individuals.

RESULT

Table 1: Frequency and Percentage distribution of sample characteristics (N=60).

Demographic Variables	Frequency(f)	Percentage (%)
Age (in years)		
a. 20 - 30	18	30
b. 31 - 40	18	30

c. 41 - 50	12	20
d. 51 - 60	12	20
Gender		
a. Male (M)	39	65
b. Female (F)	21	35
Educational Qualification		
a. Literate	5	8.33
b. Primary	3	5
c. Secondary	6	10
d. Higher Secondary	29	48.33
e. Graduate	17	28.33
Religion		
a. Hindu	48	80
b. Muslim	5	8.33
c. Christin	2	3.33
d. Other	5	8.33
Marital Status		
a. Married	26	43.33
b. Unmarried	31	51.66
c. Divorced	3	5
Family status		
a. Nuclear	36	60
b. Joint	24	40
Occupation		
a. Employed	24	40
b. Unemployed	7	11.66
c. Skilled Worker	29	48.33
Family income (in rupees)		
a. <10000	7	11.66
b. 11000-15000	25	41.66
c. >16000	28	46.66

The table 1 reveals that the majority of participants were aged 20-40 years (60%), with equal representation in both the 20-30 and 31-40 age groups (30% each). Males comprised 65% of the sample, and females 35%. Regarding education, 48.33% of participants had completed higher secondary education, followed by graduates at 28.33%, while only 8.33% were literate. The majority were Hindu (80%), with smaller percentages

from other religious groups. Over half of the participants were unmarried (51.66%), and 60% lived in nuclear families. In terms of occupation, 48.33% were skilled workers, while 40% were employed. Most families earned above ₹16,000 per month (46.66%), while 11.66% had incomes below ₹10,000. This data highlights a diverse sample in terms of age, gender, education, and socioeconomic status.

Table 2: Frequency, percentage and cumulative frequency distribution of pre-test and post-test knowledge score (N = 60)

Knowledge score	Pre Test			Post Test		
	F	%	Cf	f	%	Cf
0-12	20	33.33	20	0	0	0
13-24	40	66.66	60	20	33.33	20
25-36	0	0	60	40	66.66	60

The table 2 shows a notable improvement in knowledge scores from the pre-test to the post-test. In the pre-test, 33.33% of participants scored between 0-12, while no participants fell into this range in the post-test. For the middle range (13-24), 66.66% of participants scored in this range during the pre-test, but this percentage decreased to 33.33% in the post-test, indicating an improvement. Notably, no participants scored in the highest range (25-36) in the pre-test, but 66.66% achieved scores in this range during the post-test. This

shift demonstrates a significant increase in knowledge after the intervention.

Table 3: Mean, Mean difference, standard deviation and 'z' value between pre-test and post-test knowledge scores (N=60)

Variable	Mean		SD difference	Z value	Inference
	Pre test	Post test			
Knowledge score	14.88	23.38	6.05	2.5005	significant

Z(tab) = 2.02, P < 0.05

The table 3 shows a significant improvement in knowledge scores from the pre-test to the post-test. The mean score increased from 14.88 in the pre-test to 23.38 in the post-test, with a standard deviation difference of

6.05. The Z value of 2.5005 indicates that this improvement is statistically significant, suggesting that the intervention had a meaningful impact on increasing the participants' knowledge.

Table 4: Association between pre-test knowledge scores and selected variables (N = 60)

Demographical Variable	<Mean	>Mean	χ ² Value	Df	Level of significance
AGE					
20-30	10	8	1.78	3	p>0.05 NS
31-40	10	8			
41-50	4	8			
51-60	6	6			
Gender					
Male	19	20			
Female	11	10			
Education					
Illiterate	1	4	2.63	4	P>0.05 ns
Primary	2	1			
Secondary	3	3			
High school	15	14			
Graduate	10	7			
Religion					
Hindu	24	24	4.00	3	P>0.05 ns
Muslim	2	3			
Christin	0	2			
Other	4	1			
Marrital status					
Married	16	20	1.90	2	P>0.05 ns
Unmarried	13	8			
Divorced	2	1			
Family status					
Nuclear	18	18	0.100	1	P>0.05 ns
Joint	111	13			
Occupation					
Emplyoed	14	10	1.112	2	P>0.05 ns
Umemployed	3	4			
Skilled worker	13	16			
Family income					
10000 & BELOW	3	4	1.07		p>0.05 NS
10001 TO 15000	11	14			
15001 & ABOVE	16	12			

The table 4 reveals no significant associations between knowledge scores and various demographic factors such as age, gender, education, religion, marital status, family status, occupation, and family income. The chi-square test results indicate that knowledge levels are relatively uniform across these groups, with no statistically significant differences observed. This suggests that participants' knowledge scores are not influenced by

these demographic variables, indicating a broad and consistent distribution of knowledge regardless of factors like income, education, or marital status.

DISCUSSION

The study reveals a significant improvement in participants' knowledge scores after the intervention, as evidenced by the increase in the mean score from 14.88

(pre-test) to 23.38 (post-test) and a statistically significant Z value of 2.5005. Despite this overall improvement, no significant associations were found between knowledge scores and demographic variables such as age, gender, education, or family income, as indicated by chi-square test results ($p > 0.05$). This suggests that the intervention was effective across all demographic groups, enhancing knowledge uniformly.

In comparison to previous studies, the findings of this research highlight key similarities and differences in the factors influencing knowledge acquisition. Our study shows a significant improvement in participants' knowledge following the intervention, as evidenced by the increase in post-test scores, with 66.66% of participants scoring in the highest range (25-36), compared to 0% in the pre-test. This outcome aligns with a study conducted by Patel V (2020), which also demonstrated that targeted educational interventions led to significant gains in participants' knowledge, particularly in skill-based training programs.^[9] However, unlike Chaware et al. (2018), who found that gender played a crucial role in knowledge acquisition, our study found no significant association between gender and knowledge scores, with both male and female participants showing uniform improvement.^[10]

The finding that participants' knowledge scores did not vary significantly based on educational qualifications is in contrast to the work of Gaikwad et al. (2020), who reported a positive correlation between education level and knowledge acquisition.^[11] In our study, individuals with varying educational backgrounds, from illiterates to graduates, exhibited similar improvements. This may suggest that the intervention used in our study was effective across all educational levels, perhaps due to its inclusive and accessible nature. The results are supported by Dhoke et al. (2018), who concluded that well-structured training programs can overcome educational disparities, resulting in equitable knowledge outcomes across diverse educational groups.^[12]

Our study did not observe significant differences based on family income, indicating that financial status did not hinder participants' ability to gain knowledge. This supports the argument by Mehta et al. (2023), that equitable access to learning materials and structured interventions can mitigate socio-economic disparities in educational outcomes.^[13] The results indicate that when well-designed interventions are applied, factors such as income and education may have a reduced impact on learning effectiveness.

This study has several strengths, including a well-defined sample and a clear pre-test and post-test design that allowed for the direct measurement of knowledge improvement. The intervention was accessible and equally effective across different demographic groups, a key strength indicating the versatility and inclusivity of the program. Furthermore, the use of statistical tools

such as the chi-square test and Z-test provided robust evidence of the significance of the findings, ensuring that the results were not due to chance.

There are also limitations that must be acknowledged. The sample size was relatively small ($N=60$), which may limit the generalizability of the findings to larger populations. Additionally, the study did not explore in-depth qualitative factors, such as participant motivation or external environmental influences, which might have played a role in the knowledge improvement. Another limitation is that the post-test was conducted immediately after the intervention, so the study did not assess long-term retention of knowledge.

An unexpected finding was the uniform distribution of knowledge scores across different education levels and family income groups. This was surprising, as previous literature has often suggested that these factors play a significant role in learning outcomes. The fact that participants with lower education and income levels showed similar improvement to those with higher levels suggests that the intervention itself was particularly effective at bridging these gaps.

The purpose of this study was to evaluate the effectiveness of a Planned Teaching Programme (PTP) aimed at improving basic awareness of stress among significant individuals in selected families within a community in Jodhpur, Rajasthan. The study's hypotheses predicted that participants' post-test knowledge scores would be significantly higher than their pre-test scores, and that there would be significant associations between pre-test knowledge and selected variables. The results confirmed the first hypothesis, with a notable increase in post-test scores, while the second hypothesis was not supported, as no significant associations were found between pre-test knowledge and demographic factors like age, gender, and education.

The significance of this study lies in its demonstration that educational interventions like the PTP can effectively improve knowledge on stress awareness, even in diverse populations. This supports the role of structured teaching programs in public health education, particularly in underrepresented communities. However, some unanswered questions remain, such as the long-term retention of knowledge post-intervention and the potential impact of other factors like mental health or motivation on learning outcomes. Future research could explore these areas, as well as examine larger and more varied populations to improve generalizability and assess the effectiveness of other stress-relief techniques.

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