



A pre-experimental study on the effectiveness of IEC Package on the level of stress and coping strategies among prisoners residing in sub-jail Kaithu, Shimla 2017-2018

Ritika Soni¹, Jyotsana Kaushal², Kiran Lata³, Kumari Suchita⁴, Manisha Devi⁵, Manisha Kumari⁶, Manu⁷,
Megha Sharma⁸, Monika Sharma⁹, Neha¹⁰

¹ Assistant Professor (Psychiatric Nursing), Shimla Nursing College, Himachal Pradesh, India

²⁻¹⁰ B.Sc. N 4th Year, (Psychiatric Nursing), Shimla Nursing College, Himachal Pradesh, India

Abstract

Stress is an inevitable part of the human life. Stress is becoming a major health problem in every individual's life. About 52% of world's population is affected by stress. There are various common causes of stress like personal conflicts, job stress, physical injury, lack of sleep, working overtime, becoming the victim of a crime lack of time or money, family problems, illness, moving home relationships, marriage, driving in heavy traffic or fear of an accident etc. The objective of the study was to assess the level of stress and various type of coping strategies used to cope up with the stress among the prisoners residing in sub-jail Kaithu after administrating the IEC package. Quantitative research approach was used with pre-experimental one group pre test and post- test design. The sample size of the study was 30. Non-probability convenient sampling technique was used for selection of sample. The study showed the pre-test mean score of stress level was 45.3 and score of coping strategies used was 34.43 and post-test mean score of stress level was 45.93 and coping strategies was 36.36 then the comparison of pre test and post test score was done by using "t" test and the value of stress level and coping strategies was 6.129 and 29.3 which is considered to be highly significant. So the researchers reject the null hypothesis. The findings of the study showed the main decrease in the stress level and use of more positive stress coping strategies among the prisoners residing in sub-jail Kaithu.

Keywords: effectiveness, IEC package, level of stress, coping strategies, prisoners, jail

Introduction

The nervous system is a complex collection of nerves and specialized cells known as Neurons that transmit signals between different parts of the body. Structurally, the nervous system has two components: central nervous system and peripheral nervous system. The central nervous system consists two parts: Brain and Spinal cord. The peripheral nervous system consists: sensory neurons, ganglia and nerves that connect to one another and to the central nervous system [1].

Prison also known as correctional facility, jail, goal penitentiary, detention centre or remand centre is a facility in which inmates are forcibly confined and denied a variety of freedoms under the authority of the state [2].

Prisoner is a person who is kept in a prison as a punishment for a crime that they committed [3].

Everyone has stress, it is a normal part of life. We can feel stress in our body when we have too much to do or when we have not slept well. We can also feel stress when we worry about things like job, money, relationships, or a friend or family member who is ill or in crisis. So the stress can affected everyone in every situation either positive or negative [4].

Stress: A state of mental or emotional strain or tension resulting from adverse or demanding circumstances. Stress

can be a motivator and is essential to survival. The 'fight or flight' mechanism can tell us when and how to respond to danger. However, if this mechanism is triggered too easily, or when there are too many stressor at one time [5].

Stress in everyday terms is a feeling that people have when they are overloaded and struggling to cope with demands. These demands can be related to finance, work, relationship and other situation [6]. Christian Nordqvist 28 Nov 2017

Stress involved external stimuli, the physiological response to these stimuli and psychological processes that mediate between stimulus and response. According to Selye 1956 stress response was thought to comprise three phases a) alarm reaction b) resistance c) exhaustion [7]. COX 1975

Stressor: A stressor is a chemical or biological agent, environmental condition, external stimulus or an event that causes stress to an individual [9].

All of us know what it is to feel stressed at one time to another. In fact, according to the American psychological association, 43 percent of all adults suffer adverse health effects from stress. Furthermore, 75 to 90 percent of all visits to doctors are for stress related complaints stress takes a toll on our lives, our jobs, our health, and our relationship [10].

Dr. Marge Blaine...

Coping Strategy

A coping strategy is a conscious effort to solve a personal or interpersonal problem that will help in overcoming, minimizing ^[11]. Holahan and moos, 1987

Coping Strategy is a behavior that helps us to function better in a given situation. People with hearing loss develop coping strategies for the different listening situations they find themselves in. Some coping strategies are technical: Hearing aids are a one technical coping strategy that can help you hear well. Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events. Two general coping strategies have been distinguished: problem-solving strategies are efforts to do something active to alleviate stressful circumstances, whereas emotion-focused coping strategies involve efforts to regulate the emotional consequences of stressful or potentially stressful events. Research indicates that people use both types of strategies to combat most stressful events ^[12].

So researchers concluded that stress create many problems in daily life. It create many body changes like sleep disturbance, anxiety etc. Every person are prone to stress but we are studied only prisoners and checking the level of stress among prisoners. Therefore by providing IEC package to the prisoner, It would help them too aware about early sign of stress and helps prisoners to overcome with their stress through the help of coping strategies.

Need of study

Life is a journey and an experience. The choice is ours to make it great or mediocre. Every day we were expected to do more and more with less and less-less resources, less energy and less time. So these expectations can increase stress in our life. Stress is a universal phenomenon which is experienced by all people. Stress in our personal and professional lives is ever changing and constantly on the rise. Stress is a feeling of strain and pressure. Stress can be external and related to the environment but may also be created by internal perceptions that cause an individual to experience anxiety or other negative emotions surrounding a situation such as pressure, discomfort etc.

Stress is the body reaction to a change that requires a physical, mental or emotional adjustment or response. The Stress response is the body's way of protecting you. When working properly, it helps us to stay focused, energetic, and alert. In emergency situations, stress can save our life-giving us extra strength to defend yourself, for example, or spurring us to slam on the brakes to avoid an accident. When stress is in small amount then it is beneficial to people like students (increase their performance in studies and other activities), employees and others (like prisoners etc) to improve their work skills and increase their capabilities to accomplish their task.

The investigators want to study to assess the level of stress and associated factor like working environment (biscuit making, gardening, cooking, knitting, packet making etc), lack of family contact, negative relationship with prison staff. That triggers the level of stress among prisoners residing in sub jail kaithu. And to know about how the prisoners using coping

strategies to combat with stress and the type of coping strategies they are using. Investigators also want to compare our study with previous study to know about our effectiveness of research.

According to prison statistics INDIA,2008 compiled by the national records Bureau, as on 31:12:2008,there were 3,84,753 jail inmates lodged in 1,356 jails in INDIA, out of which 2,57,928 (67%)were under trials. of these under trials,9,746 were in Tamil Nadu.47.2% of these under trials in Tamil Nadu were in the age group 30-50 years. Nowadays Stress is an important public health problem and the leading cause of mental illness. Many studies have shown that severe level of stress can cause many mental health problems.

A Study conducted on (descriptive study) on stress and coping styles of female prisoners in Toledo. The sample size was 200 female prisoners and selected through random sampling technique. The tool was cope measures and questionnaire. The finding of such research revealed that significant stressor were separation from loved one and prison environment and reinforcement used by female prisoners⁴⁹.

RHEA Partyka, et al, 2003

A Study conducted (descriptive study) on prisoners coping skills and involvement in serious prison misconduct in United States. The sample size was 312 prisoners and was selected by stratified random sampling technique. The self report survey was used as a tool. The finding revealed that prison misconduct generates serious problem and cost in prisoners. Weather prisoners way of coping was affected their involvement in serious prison misconduct⁶⁵.

AM Rocheleau (2014)

So investigators concluded that stress is more prone in prisoners. So this study provides encouragement and awareness to prisoners that how they can cope up with their stress. The investigation also found that there is lack of inferential statistics regarding the stress and its coping strategies among prisoners of sub jail kaithu. Even the expert's opinion also motivated the investigators to undertake the following study.

Objectives

1. To assess the pre-existing level of stress among prisoners (male /female) residing in Sub-Jail Kaithu, Shimla.
2. To assess the pre-existing level of coping strategies among prisoners(male/ female)residing inSub-Jail Kaithu, Shimla.
3. To administer the IEC Package on level of stress and coping strategies among prisoners (male/female) residing in Sub-Jail Kaithu, Shimla.
4. To assess the Post test score on the level of stress among prisoners (male/ female) residing in Sub-Jail Kaithu, Shimla.
5. To assess the post test score on the coping strategies among prisoners (male /female) residing in Sub-Jail Kaithu, Shimla.
6. To assess the effectiveness of IEC Package on the level of stress and coping strategies among prisoners (male /female) residing in Sub-Jail Kaithu, Shimla.
7. To compare the Pre test score and Post test score on the level of stress and coping strategies among prisoners (male

/female) residing in Sub-Jail Kaithu, Shimla.

inmates.⁷⁶

Research methodology

Research Approach

Quantitative Research Approach was applied for present study.

Research design

Research design selected for the study was pre experimental-one group pre- test post-test design. This study fulfills the criteria such as only manipulation, no control group and there is no randomization. Sample was selected by non-probability convenience sampling technique.

Table 1

Pre-test	Treatment	Post-test
O ₁	X	O ₂

O₁: Assess the existing level of stress and coping strategies.

X: IEC package regarding level of stress and coping strategies among prisoners.

O₂: Assess the post-test level of stress and coping strategies

Setting of the study

Study was done at Kaithu sub-jail, Shimla.

- Kaithu prison in Shimla is run by Department of prisons and correctional administration, Directorate of prisons, CID Building, Block No.-31, Kasumpti, Shimla-171009 Himachal Pradesh.⁷³

The Kaithu jail does not look like a prison, cradled by mountains on all sides in the heart of Shimla. The Kaithu sub-jail traces its past to the British Raj. There was no change till the new construction of the accommodation for the jail staff around mid 1970s. But parade ground was there prior to 1950s. Now lots of other buildings have been added around jail for the staff.⁷⁴

But what distinguishes it now is an open jail program, part of a reform policy started four years ago. Prisoners from a Shimla Jail are allowed to work outside during daytime, helping them earn money and breathe freedom. The prisoners are sent out for work within an 8-km radius in the city every day. They are selected based on their conduct in jail, the number of years spent inside and adherence to parole condition. Selected prisoners sell biscuits made by inmates in the prison baker. And some of them run a popular mobile canteen near Indira Gandhi Medical Hospital, serving piping-hot dal, Rajma and kadi rice at \$40 a plate. The money they earn goes partly to their bank accounts, while 15% goes to the Prisoner welfare fund.⁷⁵

Authorized capacity in sub-jail Kaithu is male-50 and females-5. Jail in Shimla offers enough opportunity to the inmates to reform themselves. They are given training of various types so that they could earn their livelihood later in their life when they are out of these jails. Various types of items like blankets, caps, furniture, shawls and other handicraft items made by these inmates are displayed and sold at various fairs and exhibitions all around the states. Some of the facilities offered at jail in Shimla are: medical facilities, knowledge and literacy, trained jail staff, legal aids for the

Study population

Prisoners of Sub-Jail Kaithu. I.e. 30 prisoners (28males and 2 females).

Sample population

Prisoners (male and females) of Kaithu jail, Shimla.

Sample size

30 prisoners (28 males and 2 females) of Kaithu jail, Shimla.

Sampling technique

The non-probability convenience sampling technique was used for data collection.

Development and description of tools

With the extensive review of literature and discussion with the experts and with the investigator personal and professional experience a Likert’s scale and check list was developed to assess the effectiveness of the IEC package on level of stress and coping strategies. The tools for the data collection consist of three sections.

Section A

This section deals with demographic variables like age, gender, marital status, religion, education status, occupational status, family monthly income, type of family, residential area, diet, hobbies, type of crime and previous history of crime.

Section B: Likert’s scale used to assess the level of stress among prisoners. Total 20 statements were formulated.

Interpretation of scoring key: Total statements: 20

1-11: Positive statements (disagree-1, uncertain-2, agree-3)
 12-20: Negative statement (disagree-3, uncertain-2, agree-1)
 Total score: 60

Table 2

Sr. No	Level of stress	Score
1.	Mild stress	48-60
2.	Moderate stress	36-47
3.	Severe stress	35 and below 35

Section C: Check list to assess the type of coping strategies used by prisoners of Kaithu jail. Total statements: 20

1-10: Positive statements
 11-20: Negative statement
 Table Total score: 40

Table 3

Sr.no.	coping Strategies	Score
1	Less likely used coping strategies	1-10
2	Likely used coping strategies	11-20
3	Oftenly used coping strategies	21-30
4	Highly used coping strategies	31-40

Data collection procedure

Investigators had collected data in 2 sections i.e. pre-test and

post-test. Before data collection formal written permission was taken from Directorate General of Prison (DGP), Kasumpti Shimla. The investigators personally met the DGP and explain about the study to permit us permission for research work.

Self-introduction and introduction regarding research study was given to prisoners residing in Kaithu-jail, Shimla. The purpose of study was explain to the study subjects and was assured about the confidentiality of responses. Pre-test was conducted on level of stress and coping strategies on 22-3-2018 among prisoners. After conducting pre-test, awareness was provided to the prisoners residing in Kaithu-jail through IEC package. After IEC package, the post-test was taken on 23-3-2018 in order to assess the effectiveness of IEC package in creating awareness about level of stress and positive coping strategies among prisoners. After all that analysis was done by using differential statistics and inferential statistics’.

Ethical consideration

- Written permission was obtained from the head of the nursing college.
- Written permission was obtained from the Directorate General of prison (DGP).
- The purpose and details of the study was explained to the subjects.
- Assurance was given regarding the confidentiality of the data collection.
- Verbal consent was taken from the study subject

Validity

Tool is validated from 3-5 experts from different medical/psychiatry fields.

Plan of data analysis

Descriptive and inferential statistics were employed to analyze the obtained data as shown below:

Descriptive statistics

- a. Frequency and percentage distribution to describe demographic variables.
- b. Mean median and standard deviation.

Inferential statistics

Paired ‘t’- test to assess and compare the pre-test and post-test level of stress and coping strategies among prisoners was applied.

Result

a) To assess the pre-test level of stress

Table 4: depicts the frequency and percentage distribution of pretest level of stress among prisoners. Majority of prisoners 20 (66.6%) had moderate level of stress and 09 (30%) prisoners had mild level of stress and remaining prisoners 01 (3.3%) comes under severe Level of stress.

Table 4: Depicts frequency and percentage distribution of pretest level of stress among prisoners.

S. No.	Level of Stress	Range	No. of prisoners	Percentage
1.	Mild stress	48-60	09	30%

2.	Moderate stress	36-47	20	66.6%
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3.	Severe stress	Below 35	01	3.3%
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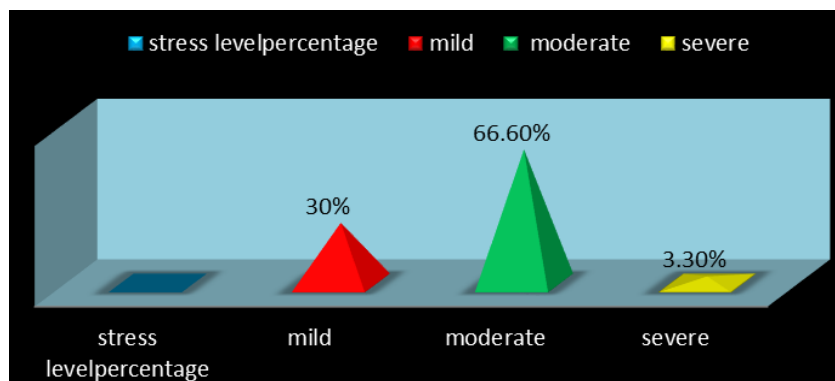


Fig 1: Frequency and distribution of study subjects as per pre-test stress level score.

b) To assess the post-test level of stress

Half 15 (50%) among the total samples falls in mild level of stress and remaining half 15 (50%) had moderate level of stress and majority of 0(0%) had showed severe level of stress.

Table 5: Depicts frequency and percentage distribution of post-test level of stress score among prisoners. N=30

S. No.	Level of stress	Range	No. of Prisoners	Percentage
1.	Mild	48-60	15	50%
2.	Moderate	36-47	15	50%
3.	Severe	Below 35	0	0%

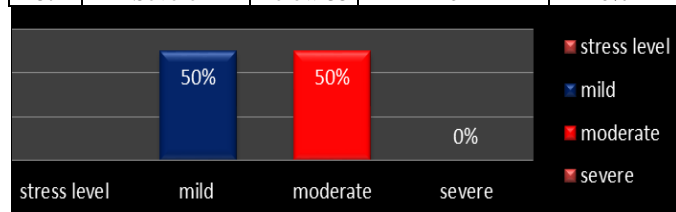


Fig 2: Frequency and percentage distribution of study subjects as per post-test stress level score.

Section C: Assessment of pretest and posttest checklist (coping strategies) score among prisoners.

Table 6: Depicts the pretest checklist score on coping strategies among prisoners N=30

S. No	Categories	Range	No of Prisoners	percentage
1	Less likely used	1-10	0	0%
2	Likely used	11-20	0	0%
3	Oftenly used	21-30	4	13.35%
4	Highly used	31-40	26	86.6%

Table: 6 depict the frequency and percentage distribution of pretest checklist score on coping strategies among prisoners. Majority of the prisoners 26(86.6%) had highly used coping strategies, a majority of prisoners 4(13.5%) had Oftenly used coping strategies, majority of prisoners 0(0%) had less likely used coping strategies.

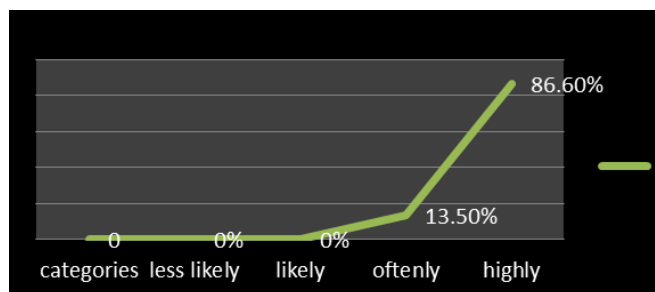


Fig 3: Frequency and percentage distribution of study subjects as pretest checklist score on coping strategies.

Table 7: Depicts the frequency and percentage distribution of posttest checklist score of coping strategies among prisoners.

Sr. No.	Categories	Range	No of Prisoners	Percentage
1	Less likely used	1-10	0	0%
2	Likely used	11-20	0	0%
3	Oftenly used	21-30	0	0%
4	Highly used	31-40	30	100%

Table depicts the frequency and percentage distribution of posttest checklist score for coping strategies among prisoners. Majority of the prisoners 30(100%) has highly using coping strategies, and 0(0%) had less likely used coping strategies.

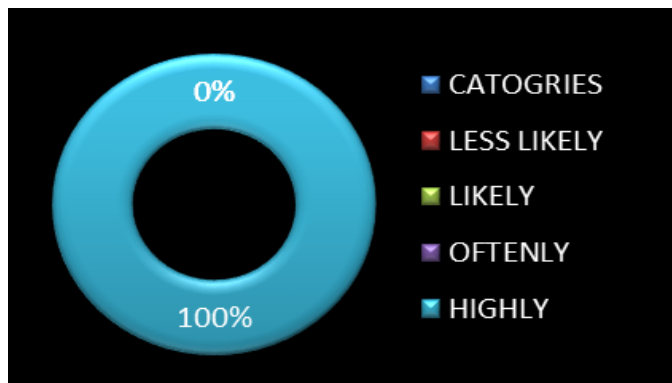


Fig 4: frequency and percentage distribution of study subjects of post- test checklist score among prisoners

Section D: Comparison of pretest and posttest Likert’s score on the effectiveness of IEC package

Table 8: Comparison of Pre Test and Post Test Likert’s Score on the Effectiveness of IEC Package.

Test	Mean	S.D	‘t’ value
Pre test	45.3	0.72	6.129
Post test	45.93	0.91	

***P<0.05, S-Significant

Section E: Comparison of pretest and posttest checklist score on the effectiveness of IEC package

Table 9: Comparison of Pre Test and Post Test Checklist score on the effectiveness of IEC Package.

Test	Mean	S.D	‘t’ Value
Pre test	34.43	0.531	29.3
Post test	36.36	0.563	

***P<0.05, S-significant

Discussions

This chapter is concentrating on the findings derived from the statistical analysis. The objectives of study were:

- a) **To assess the stress level in pre-test scoring among prisoners:** The pre-test score was 45.3 and it revealed a majority of 20 (66.6%) had moderate level of stress and 09 (30%) prisoners had mild level of stress and remaining prisoners 01 (3.3%) comes under severe type of stress.
- b) **To assess the stress level in posttest scoring among prisoners:** The post-test score was 45.93 and it revealed half 15 (50%) suffering from moderate type of stress and majority of 0 (0%) had showed severe type of stress.
- c) **To compare the pre-test and post-test Likert’s score on the effectiveness of IEC package:** After conducting pre-test and post-test there is significant reduction in stress level among the prisoners. The pre-test score was 45.3 and post-test score was 45.93.
Dr. Swamy T.N.V.R, *et al.* (2015) conducted a descriptive study on the role of prison environment on stress among the prisoners in Bangalore Jail. The sample size is 712. The tool for survey was risk assessment scale. The survey method was used to collect the data by research methodology. The finding of the survey revealed that prison environment does play an important role in the development of stress and psychiatric problem and high level of mental distress.⁴³
- d) **To assess the pre-test checklist score of coping strategies among prisoners:** The pre-test checklist score was 34.43 and revealed majority of the prisoners 26 (86.6%) had highly used coping strategies, a majority of prisoners 4 (13.5%) had Oftenly used coping strategies, majority of prisoners 0 (0%) had less likely used coping strategies.
- e) **To assess the post-test checklist score of coping strategies among prisoners:** The post-test checklist score was 36.36 and revealed majority of the prisoners 30 (100%) has highly using coping strategies and 0 (0%) had less likely used coping strategies.
- f) **To compare the pre-test checklist and post-test checklist score on the effectiveness of IEC package:** After conducting pre-test and post-test there is significant improvement in the result. The pre-test score was 34.43

and post-test score was 36.36. The awareness regarding positive coping strategies is improved significantly.

Summary

Stress is an inevitable part of life and most common problem in the world. Presently stress commonly affects the whole population but we found that the stress is very high among the prisoners. The stress leads to the various types of health consequences like anxiety, depression, personality disorders, heart disorders, gastrointestinal disorders etc. Investigators assessed the level of stress among prisoners. So to cope up with the stress prisoners used different positive and negative type of coping strategies. But every individual vary in their abilities to cope up with the stress. To reduce the use of negative type of coping strategies investigators felt the need to provide awareness regarding various positive and negative types of coping strategies. By providing IEC package, the investigators felt that it would be possible to increase the awareness regarding adopting various types of positive coping strategies to reduce the stress. Keeping this in view the present study condition to assess the effectiveness of IEC package among prisoners at Kaithu jail, Shimla was undertaken.

Conclusion

The conclusion of the study revealed that there was a significant improvement in adopting the positive coping strategies to reduce stress among prisoners (male, female) after providing IEC package

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Words are often too less to reveal ones deep regards. An understanding of the work like this is never the outcome of the efforts of single person. I take this opportunity to express my profound sense of gratitude and respect to all those who helped me to complete this thesis successfully.

It is God Almighty, the Holy Spirit who blessed us with the courage to accomplish the task that we started in an attempt for not only to enhance the knowledge but also to modify the behavior

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