ISSN 2230-8768

Volume-18, Issue 1-2, January - December 2017

NJPSW

NATIONAL JOURNAL OF PROFESSIONAL SOCIAL WORK

An official publication of
The Indian Society of Professional Social Work (ISPSW)
Secretariat: Department of Psychiatric Social Work
National Institute of Mental Health and Neuro Sciences (Institute of National Importance)
Bengaluru - 560 029, Karnataka, India

NATIONAL JOURNAL OF PROFESSIONAL SOCIAL WORK (NJPSW)
Volume-18, Issue 1-2, January - December 2017

Published by
Indian Society of Professional Social Work (ISPSW)

Secretariat
DEPARTMENT OF PSYCHIATRIC SOCIAL WORK
NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES (NIMHANS)
Bengaluru- 560029, INDIA

(ESTD.1970)

Reg. No. 340/90-91

INDIAN SOCIETY OF PROFESSIONAL SOCIAL WORK

There is a consensus among Professional Social Workers that mental health is a positive state where an individual experiences physical, mental and social well-being so as to fulfil her or his potentials to the fullest. Resilience is a process of adapting in the face of adversities. It is important for Professional Social Workers to reflect and help people to bounce back in the face of trauma and the resultant stress. This Volume aims at addressing this aspect of human endeavour.

The Indian Society of Professional Social Work (ISPSW) is the oldest Association of Professional Social Workers in India that is aimed towards empowering the society for social development through professional social work practice.

The Society conducts Annual conferences, Seminars and Symposia on various social issues all over India. This is the 35th year of the conference and the theme is: Social Stress, Resilience and Mental Health. The Best Paper Presentations are awarded in four categories; i.e. for Social Work Teachers, Researchers, Practitioners and Students and in this way the Society encourages all to participate and present papers at the Annual Conference.

The National Journal of Professional Social Work (NJPSW) is an official publication of ISPSW. The Life Members of ISPSW are entitled for:

1. Free copy of National Journal of Professional Social Work
2. Discount in Registration fees for the ANC of ISPSW and International Conferences abroad
3. Enrolment to Award Paper Presentations
4. ISPSW Certificate on payment of prescribed fee

For further details please contact:

Dr. R. Dhanasekara Pandian
Hon. General Secretary
Indian Society of Professional Social Work (ISPSW)
Department of Psychiatric Social Work
National Institute of Mental Health and Neuro Sciences (NIMHANS)
Bengaluru - 560 029, Karnataka, India.
Web: http://ispsw.wordpress.com Email: ispsw1970@gmail.com

Prof. D. Muralidhar
President & Editor-in-Chief

OFFICE BEARERS OF THE INDIAN SOCIETY OF PROFESSIONAL SOCIAL WORK

PRESIDENT
Prof. D. Muralidhar

VICE - PRESIDENTS
Dr. Md. Ameer Hamza
Late Dr. N. Krishna Reddy

HON. GEN. SECRETARY
Dr. R. Dhanasekara Pandian

JOINT SECRETARIES
Dr. Sarbari Sen
Dr. Sojan Antony

TREASURER
Dr. N. Janardhana

EXECUTIVE COMMITTEE MEMBERS

Prof. K. Anuradha
(Tirupati, Andhra Pradesh)

Dr. Atiq Ahmed
(Ajmer, Rajasthan)

Dr. Eliza Pereira
(Bengaluru, Karnataka)

Dr. Jahanara M. Gajendragad
(New Delhi)

Dr. Lakshmana G.
(Kalaburagi, Karnataka)

Mr. Nayan Roy Chaudhuri
(Kolkata, West Bengal)

Dr B.P. Nirmala
(Bengaluru, Karnataka)

Dr. Sijo George
(Coimbatore, Tamil Nadu)

Prof. Sonia Deuri
(Tezpur, Assam)

Dr. Vranda M.N.
(Bengaluru, Karnataka)

EX OFFCIO MEMBERS

Prof. K. Sekar
(Former President)

Mr. Amal Kumar Basu
(Former Gen. Secretary)

NATIONAL JOURNAL OF PROFESSIONAL SOCIAL WORK
Volume-18, Issue 1-2, January - December 2017

Published by:
The Indian Society of Professional Social Work (ISPSW)

Secretariat:
Department of Psychiatric Social Work
National Institute of Mental Health and Neuro Sciences (NIMHANS)
Bengaluru - 560 029, Karnataka, India

Cover page designed by:
G. Ragesh

Designed by:
Tarjani Communications Pvt. Ltd
1st Floor, Rama Bhavan Complex
Kodialbail, Mangaluru – 575 003
Tel: 0824 4271199
Website: www.tarjani.co email: design@tarjani.com

NATIONAL JOURNAL OF PROFESSIONAL SOCIAL WORK

EDITORIAL BOARD

Editor-in-Chief — Prof. D. Muralidhar

Editor — Prof. Rameela Shekhar

Members

Prof. P. Ilango

Prof. K. Anuradha

Prof. Gunjal

Dr. Md. Ameer Hamza

Prof. Shahin Sulthana

Prof. Kalpana Sarathy

Dr. Lakshmana G.

Dr. Kamalesh Kumar Sahu

Dr. Bino Thomas

Dr. Ragesh G

Dr. E. Sinu

Editorial Assistance

Ms. Sphoorthi G. Prabhu

CONTENT

EDITORIAL

This is the 18th Volume of The National Journal of Professional Social Work. The focus of the articles is on Social Stress, Resilience and Mental Health. There is no doubt that with the fast pace of changes that are taking place in society, mostly driven by technology and its fallout, resilience seems to be taking centre-stage while dealing with stress in order to maintain a semblance of mental health, both for the common man as well as the Social Work Professionals.

The publication, as with the one that has preceded it, aims to bring together articles pertaining to Research and Practices in the field of Professional Social Work to enable young professionals to learn from empirical sources. The articles highlight research in the area of Resilience and Mental Health which will help Professional Social Workers to develop themselves in the area. This illustrates the importance of this Journal in the dissemination of new knowledge which can be used by academicians, practitioners and students of Social Work. The AGBM of ISPSW, in its meeting held at Pondicherry on 23 February 2018 had authorized the editor to edit the back volume articles of 2017 and publish the same in 2018. It feels good to bring this idea to fruition.

The Editorial Board as mentioned in the previous volume has brought forth some guidelines and formats for the articles to be written and to a large extent the Board has seen to it that the authors have adhered to them, though we are aware that there needs to be more improvement in the same, which the Editorial Board will implement from the forthcoming Volumes. This issue also saw the upgrading of the articles due to the review comments of the specially constituted Review Committee which comprised academician, practitioners and researchers from India and abroad. At this juncture I would like to thank them for their suggestions and response in a short time. I thank **Dr. Jotheeswaran A Thiyagarajan**, Technical Officer (Epidemiologist), Department of Ageing and Life Course, WHO, Geneva; **Dr. Janki Shankar**, Assoc. Professor, Faculty of Social Work, University of Calgary, Central and Northern Region, Edmonton, AB T6G0T2; **Dr. Rashmi Gangamma**, Assoc. Professor, 601 E. Genesee Street, Peck Hall, Dept of Marriage and Family Therapy, Syracuse, New York – 13202; **Dr. N. Janardhana**, Additional Professor, Department of Psychiatric Social Work, NIMHANS, Bengaluru; **Dr. Lakshmana G**, Assistant Professor, Dept. of Social Work, School of Social and Behavioral Sciences, Central University of Karnataka, Kalaburgi; **Dr. Manisha Kiran**, Head, Dept of PSW, RINPAS, Kanke, Ranchi; **Prof. P. Ilango**, Dean, Faculty of Arts, Bharthidasan University, Tiruchirappalli; **Dr. Sonia Pereira Deuri**, Prof. & Head, Dept of PSW, Lokopriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur; **Dr. Sojan Antony**, Assistant Professor of Psychiatric Social Work, National Institute of Mental Health & Neuro Sciences Bengaluru; **Dr. Jahanara M Gajendragad**, Assoc. Prof., IBHAS, New Delhi; **Dr. Anish Cherian**, Assistant Professor of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru.

Any piece of academic writing based on field work is no doubt a challenge to edit, since the findings may or may not confirm to normally understood social constructs and many times is seen from the prism of students of Social Work. The reviewers have been gracious in their comments and observations. Their experience and technical finesse in making the observations have lifted the quality of the articles, undoubtedly. I remain grateful to them.

It is any editor's fond hope the publication will contribute to the area of learning, both for learners and policy makers. While some of the discoveries of the researchers may not be new, they serve to reinforce already held perceptions of the discipline. Some others are responses to changing lifestyles and serve to draw attention to new ways of functioning and relating in technology-driven times. This is very true with regard to the topic of Resilience and Mental Health.

I acknowledge the help rendered by the members of the present Editorial Board headed by **Prof. D. Muralidhar** especially their support in bringing out this issue during the XXXVII National Annual Conference of ISPSW, at the Department of Psychiatric Social Work, NIMHANS, Bengaluru.

I am sure these articles will add to the insights in the field of Social Work and all of us will benefit from them.

Here's wishing all readers a fruitful time.

Dr. Rameela Shekhar
Editor (2018)

Effectiveness of Training Program on Community Based Psychosocial Disaster Preparedness for Community Volunteers

[1]Debashree Bora, [2]Shivarudraiah Manjunatha,
[3]Elangovan Aravind Raj, [4] Kasi Sekar, [5]Mathai Kutti John

Introduction: India is a country which has been identified as one of the six major disaster prone countries in the world. It is extremely important to draft a holistic approach to avert and devise plans to mitigate the effects of disaster. Disaster risk reduction strategies play an important role. In this context, communities being the first responders in any disaster, it is imperative to build their capacity in disaster preparedness programs. National Institute of Mental Health and NeuroSciences (NIMHANS) in collaboration with World Vision India has taken the initiative of training the community volunteers on psychosocial disaster preparedness.

Methodology: A total of 186 community members from 15 clusters of World Vision field areas were trained in five batches for three days each at NIMHANS on psychosocial disaster preparedness. The content of the program included impact, vulnerability, resource mapping, the role of volunteers and task force formation. A 30-item checklist was used to assess the effectiveness of the training program. Qualitative assessment was also carried out in the form of feedback sheet about the content, methodology and usefulness of the program.

Results: The socio-demographic profile of the participants included equal distribution of men and women with their ages ranging from 18-60 years. The assessment showed a significant difference in the level of knowledge on psychosocial disaster preparedness among the community volunteers after the training program. The qualitative assessment also showed that the program was useful and informative as most of the participants were attending such a program for the first time.

Conclusion: Building the capacity of the community in psychosocial disaster preparedness would help the community to be better prepared to face the hazards and reduce the vulnerability in the community.

Keywords: Disaster Preparedness, Community volunteers, Training Program, Assessment.

[1] M.Phil, Ph.D. Scholar, Department of Psychiatric Social Work, Lokopriya Gopinath Bordoloi, Regional Institute of Mental Health, Tezpur (Assam) Email: bora.782101@gmail.com

[2] M.Phil, Ph.D. Scholar, Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences, Bengaluru. Email: manjunathas.manju7@gmail.com

[3] Associate Professor, Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences, Bengaluru. Email: aravind.nimhans@gmail.com

[4] Professor, Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences, Bengaluru. Email: sekarkasi@gmail.com

[5] Senior Manager, World Vision India Bengaluru. Email: mathai_kutty@wvi.org

INTRODUCTION

India is a homeland to various communities and all the communities share their common geographical location. It also needs to be considered that India is a country which has been identified as one of the six major disaster- prone countries in the world (Mohapatra, Mandal, Bandyopadhyay, Tyagi, & Mohanty, 2012). These disasters may be a result of a rapid change in geographical areas with urbanization, industrial growth and deforestation. Natural disasters like tsunamis, earthquakes, droughts and landslides as well as manmade disasters such as the Bhopal gas tragedy and serial bomb-blasts have resulted in tremendous loss to the nation's economy. A disaster's social impacts can be characterized and defined in several ways. A disaster is a sudden, devastating event that brings great damage, loss, destruction and desolation to life and property. The damage caused by a disaster is incalculable and varies with the geographical location, climate and the type of the earth surface (Lone & Subramani, 2016).

The impact on the victims of any disaster could be classified by its physical, psychological, social and economic impact. The risk to a community depends on its vulnerability (Sekar, 2005). Considering the gross damage to life and properties, it is important to realize that one should be preparing to face any kind of disaster in order to reduce the loss as well as ensuring enhance security (Yesmin & Baruah, 2014). Here the concept of "Disaster Preparedness" arises. The knowledge from previous experiences of loss due to disaster by people creates valuable insight into community subjected to frequent disasters and provides a platform for community assistance as well as recovery programs (West, Woods, Casella, & Usher, 2015). Thus it is extremely important to draft a holistic approach to avert and devise plans to mitigate the effects of a disaster in community level. Disaster risk reduction strategies play an important role. In this context, community being the first responders in any disaster, it is very imperative to build their capacity in disaster preparedness programs. Community based disaster preparedness is considered as a holistic approach to prevent, prepare and meet the mitigation plans and response (Revi, 2008). Raising awareness increases the community effort to be self-prepared and to reduce disaster risks as well as to combat insufficient preparedness to reduce future disaster damage (Onuma, Shin, & Managi, 2016).

Vulnerability and Resource Mapping of those common geographical areas to identify the community resources, the possible hazards or risk, the necessary needs should be assessed. Here the most vulnerable group also includes women, children, elderly and handicapped people. An organized course of actions is needed to be carried out by the community volunteers and thus Community Based Task-Force group be formed and trained by experts.

The effectiveness of preparedness training program was found positive in many foreign countries such as Japan, Kenya etc (Banerji, 2013 and Burke, 2014). A study conducted by Newport and Jawahar (2003) in rural India showed a positive outcome of the community in resource identification, capabilities, coping mechanisms and vulnerability assessment.

National Institute of Mental Health and Neuro Sciences (NIMHANS) in collaboration with World Vision India has taken the initiative to train the community volunteers from slum areas on psychosocial disaster preparedness. The study aimed to explore participant's knowledge, both subjectively and objectively, through qualitative and quantitative evaluation. The study aimed to train the community volunteers on psychosocial disaster preparedness and create a task force group as a part of disaster risk reduction strategies.

The Objectives of the study were to impart knowledge on psychosocial disaster preparedness to community volunteers through a three-day training program and to assess their knowledge before and after the training program.

METHODOLOGY

The training program was conducted in five batches at Department of Psychiatric Social Work, NIMHANS, Bengaluru.

Sample: A total number of 186 volunteers from 15 clusters consisting of 26 localities were part of the training program out of which a total of 118 volunteers who were present for all the three days of the training program as well as the pre and post assessment were considered as the final sample for the current study.

Table 1: Cluster wise localities and volunteers

Cluster No.	Number of localities	Number of volunteers
1	2	10
2	2	10
3	2	10
4	3	10
5	1	8
6	1	7

7	1	9
8	2	13
9	1	13
10	3	14
11	2	17
12	2	15
13	2	15
14	1	22
15	1	13
Total=15	**Total=26**	**Total=186**

Table 2: Sample of the study

Batch	Number of volunteers who participated in the training program	Final sample for the study
1	41	19
2	31	27
3	31	23
4	49	25
5	34	24
Total = 5	**Total = 186**	**Total = 118**

Content of the Training Program

The content of the program included understanding of disaster, impact of disaster, circle of support, vulnerability and resource mapping, reactions due to stress, family life cycle, working with children, formation of task force groups, multiplicity of roles as a task force member and care for caregiver.

Participatory methodologies were used in the training program and it included brainstorming, demonstration, information providing, role play, games and discussions, resource and hazard mapping.

Table 3: Details of the Community-Based Disaster Preparedness Training Program

Session No	Topic	Methodology	Duration
Day 1			
1	Introduction	Lecture	15 minutes
2	Participants profile and pre-assessment	Brainstorming	45 minutes
3	Understanding Disaster	Brainstorming	40 minutes
4	Sharing of experiences	Individual activity	45 minutes
5	Impact of Disaster	Group discussion	30 minutes
6	Need of the survivor	Game	30 minutes
7	Concept of loss	Brain Storming	50 minutes
Day 2			
8	Recap of previous day	Discussion	30 minutes
9	Visibility and invisibility	Activity	15 minutes
10	Understanding the experiences of stress	Card Sorting	40 minutes
11	Family life cycle	Brainstorming	45 minutes
12	Techniques of Psychosocial Care	Activity/Games/ discussions	45 minutes
13	Spectrum of care	Brainstorming	30 minutes
14	Resource & hazard mapping	Group Activity - Drawing	30 minutes
Day 3			
15	Free listing of children's problems	Discussion, explanations	30 minutes
16	Understanding emotional reactions of the children	Group discussion	40 minutes
17	Regression	Activity /Discussion	20 minutes
18	Stress management sessions	Discussion/Brainstorming	20 minutes
19	Orientation visit to the different departments in NIMHANS	Institute Visit	45 minute
20	Listing out of Task Force Group members	Group Discussion	15 minutes
21	Discussion on emergency numbers at various levels	Presentation	30 minutes
22	Feedback		10 minutes
23	Post assessment		30 minutes

Tools for Data Collection:

1. Participant profile that included personal, educational and occupational details as well as the past training programs they attended was used to record the socio-demographic profile of the participants.

2. A checklist that consisted of 30 items with 'Yes' or 'No' response was used to assess the knowledge of the volunteers before and after the training program. The contents of the questionnaire were about understanding disaster, disaster preparedness, impact of disaster, importance of community preparedness, psychological first aid in disaster, mental health problems, role of family in preparedness, post-disaster family reunion, disaster rescue operation, importance of psychiatrists, vulnerability mapping, vulnerable groups, psychosocial preparedness, community action, mental health of caregivers, social cohesion, normal reactions to disaster, psychological counseling, taskforce in disaster, awareness of emergency numbers.

3. Qualitative assessment was also carried out in the form of a feedback sheet about the overall contents, methodology and usefulness of the program.

Statistical Analysis:

Descriptive statistics such as frequency distribution, measures of central tendency were carried out to describe the data. McNemar test and Student t test was used to compare the item wise and overall score of the participants respectively on the check list before and after the training program. The feedback of the participants is presented as verbatim.

RESULTS

A majority of the participants (68.6%) belonged to the age group of 15 – 30 years. 39.8% participants had higher secondary education. Less than 5% of participants had no formal schooling and similarly participants who were educated up to postgraduation represented the least. The group was marginally over represented by females (55.1%). The occupational profile of participants shows that, half of the participants did not specify their occupational status. Other categories mainly included auto driver, civil work, clinic, cook, driver, garment worker, hospital worker, house keeper, household work, painting and plumber.

Table 4: Item-wise effectiveness of Intervention

S. No	ITEM	1		2		3		4		p value
		N	%	N	%	N	%	N	%	
1	Concept of disaster preparedness	14	11.9	29	24.6	6	5.1	69	58.5	p<0.001*
2	Measures of preparedness	10	8.5	32	27.1	9	7.6	67	56.8	p<0.001*
3	Impact of disaster	12	10.2	22	18.6	22	18.6	62	52.5	p>0.05
4	Response to disaster	9	7.6	26	22.0	27	22.9	56	47.5	p>0.05
5	Importance of preparedness	31	26.3	30	25.4	11	9.3	46	39.0	0.004*
6	Preparedness and outcome at crisis event	12	10.2	19	16.1	19	16.1	68	57.6	p>0.05
7	Psychosocial first aid	26	22.0	28	23.7	17	14.4	47	39.8	p>0.05
8	Mental health problems	34	28.8	23	19.5	28	23.7	33	28.0	p>0.05
9	Measures of family	5	4.2	25	21.2	18	15.3	70	59.3	p>0.05
10	Family reunion	2	1.7	25	21.2	12	10.2	79	66.9	p>0.05
11	Specific group concept	33	28.0	26	22.0	20	16.9	39	33.1	p>0.05
12	Understanding need of mental health	87	73.7	13	11.0	15	12.7	3	2.5	p>0.05
13	Vulnerability mapping	1	.8	24	20.3	11	9.3	82	69.5	p<0.001*
14	Disaster preparedness and death toll	20	16.9	28	23.7	18	15.3	52	44.1	p>0.05
15	Vulnerable groups	26	22.0	32	27.1	25	21.2	35	29.7	p>0.05
16	Volunteer groups	0	. 0	15	12.7	5	4.2	98	83.1	p<0.001*
17	Psychosocial preparedness	2	1.7	13	11.0	9	7.6	94	79.7	p>0.05
18	Community action	5	4.2	29	24.6	13	11.0	71	60.2	p>0.05
19	Children and disaster	27	22.9	35	29.7	21	17.8	35	29.7	p<0.001*
20	Mental health of care givers	19	16.1	29	24.6	16	13.6	54	45.8	p>0.05

21	Adult's disaster preparedness	24	20.3	33	28.0	20	16.9	41	34.7	p>0.05
22	Help of PS preparedness in to identify mental illness.	1	.8	16	13.6	11	9.3	90	76.3	p>0.05
23	Building social cohesion	4	3.4	19	16.1	5	4.2	90	76.3	p<0.001*
24	Taskforces types in disaster	8	6.8	22	18.6	14	11.9	74	62.7	p>0.05
25	Psychological counseling	36	30.5	27	22.9	25	21.2	30	25.4	p>0.05
26	Taskforces types in disaster	5	4.2	66	55.9	4	3.4	43	36.4	p<0.001*
27	Disaster help line number	5	4.2	59	50.0	2	1.7	52	44.1	p<0.001*
28	Emergency Numbers	10	8.5	64	54.2	9	7.6	35	29.7	p<0.001*
29	Everyone is affected by a disaster	1	.8	19	16.1	4	3.4	94	79.7	p<0.001*
30	Believe in rumors	3	2.5	21	17.8	18	15.3	76	64.4	p>0.05

1 – Wrong answer in the pre and post assessment

2 – Wrong answer in the pre assessment, right answer in the post assessment

3- Right answer in the pre assessment, wrong answer in the post assessment

4- Right answer in the pre and post assessment

*significant at 0.05 level

Table 4 shows the results of the item wise analysis of the checklist to find out the effectiveness of the training program. McNemar test was used to find out the item wise effectiveness of training program. In items such as concept of disaster preparedness, measures of preparedness, importance of preparedness, vulnerability mapping, importance of volunteer groups, children in disaster, social cohesion, task force, emergency numbers, the percentage of participants' whose knowledge level increased in the post assessment compared to the pre assessment were found to be significantly high ($p<0.05$) compared to that of the percentage of participants' whose knowledge level decreased in the post assessment compared to the pre assessment.

Table 5: Pre and Post Training assessment

	Mean (n = 118)	SD	t	df	Sig (2-tailed)
Pre intervention	18.80	3.1	-8.893	117	<0.001
Post intervention	22.32	2.9			

Table 5 shows the result of the paired t test to find out the significant difference in the mean of the overall score before and after the interventions. The results show that there is a significant difference in the mean score of the participants before and after the intervention ($t=8.893$, $df = 117$, $p<0.05$). The mean score in the post assessment (22.32) was significantly higher than the mean score of the pre assessment (18.80).

Feedback from the Participants:

- "This is the first of its kind training program related to psychosocial disaster preparedness we are attending."
- "It was a wonderful opportunity for us to learn about the various aspects of psychosocial disaster preparedness and before the training program, we did not know that so many things are there in Disaster Management."
- "The methodology was very participatory and it helped us to understand the concepts of psychosocial disaster preparedness easily."
- "The content of the training program would be really helpful and handy for us in the field whenever a disaster strikes our community."

DISCUSSION

As a majority of the participants were in the age group of 15 – 45 years, the participation of the trained personnel in Community-Based Disaster preparedness activities in the community can be more sustainable as they would be delivering the services for a long time. Also, except for about 5% of the participants, all of them were literate which would facilitate the volunteers to steer the program effectively in the community. The gender representation is also equally important in creating the trained manpower in the community. In this regard, the participants of the current training program included an almost equal number of males and females which would enable them to address issues of both men and women during disasters.

The content of the training program was designed basically to address not only the psychosocial issues but also general preparedness at community level which would facilitate in integrating psychosocial care in Community-Based Disaster-Preparedness Programs. This allowed the trained personnel as well as other identified volunteers in the community to give importance to all aspects of impacts of disaster including psychosocial issues.

The participatory methodology used in the training program helped the participants to easily get in to the training mode and adapt themselves to the situation. It also helped them to break the hesitation to participate in various activities as each one of the participants was given a chance to participate in one or the other activity.

The results of the current training program have proved that the participant has benefitted from the training program as proved in the past by Newport & Jawahar(2003) thus creating a caring community with efforts to sustain the inputs given in the training program. This can well be done by the task force groups formed during the training program by forming a community-based disaster preparedness plan.

The participants were enrolled in different task force groups that included early warning and communication, search and rescue, first aid, relief and coordination and shelter management groups. The task force members would be involved in strengthening their task force by identifying and training the volunteers in the community. This would help in institutionalizing the community-based disaster preparedness program in the community.

The exposure of facilities like NIMHANS to participants by conducting the training program in the campus helped the participants to have a firsthand knowledge about the treatment facilities available for mental health issues at a tertiary institute which would address issues such as stigma towards treatment of mental illness among the members of the community through the trained volunteers. Placing local communities at the centre of Disaster Management is a strategy to achieving progressively higher levels of resilience to disasters.

When a community is prepared to face any disaster-related challenge, the impact of the disaster would be comparatively less than a community which is not at all prepared. For example, Odisha earlier faced huge losses of lives and properties due to the super cyclone

in 1999 which has significantly reduced over years due to its effective community-based disaster plans. So, community based disaster preparation including mitigation plans to reduce the risk would be beneficial to all the community people living in a disaster-prone country like India.

IMPLICATIONS

The study is of much importance in the present day context as community-based awareness, preparation and planning make us manage the potential hazard effectively. It helps individuals and the families to face the disasters efficiently. The present study is an indicator to say that education and awareness makes the community more aware and educated about disaster preparedness. At the macro level, such training programs, where psychosocial care is integrated with other capacity building programs in the community, should be made a part of the guidelines of disaster management.

Limitations of the current study:

1. The approach used in this study is not a true measure of effectiveness. To test the effectiveness, we need to use the randomized controlled trial study design or step-wedge design.
2. It will be more effective to train the group based on homogeneity such as similar age, gender to discuss the gender-based issues and explore in detail. This is because many a time sensitive issues are not discussed in a heterogeneous groups.

CONCLUSION

The purpose of the training program was a holistic approach to train the community volunteers to prepare contingency plans for future disasters. The entire contents of the training program for disaster preparedness included participatory methodologies in the form of games and group discussions related to the sessions, which made the participants more attentive and helped them to grasp the basic understanding of the perspective of the training program.

Building the capacity of the community in psychosocial disaster preparedness would help the community to be better prepared to face the hazards and reduce the vulnerability in the community.

REFERENCES

1. Banerji, Priyanka. (2013). Comparative Analysis of Disaster Management between Japan & India. *IOSR Journal of Business and Management. 13. 62-74.* 10.9790/487X-1366274.

2. https://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/IASC_WFP,%202014.pdf

3. Lone R. I., & Subramani, S. (2016). Natural Disasters: Causes, Consequences and Its Preventive Role in Sustainable Development. *The International Journal of Indian Psychology, Volume 3, Issue 3, No. 4,* 57.

4. Mohapatra, M., Mandal, G., Bandyopadhyay, B., Tyagi, A., & Mohanty, U. (2012). Classification of cyclone hazard prone districts of India. *Natural hazards, 63(3)*, 1601-1620.

5. Newport J. K., & Jawahar, G. G. (2003). Community participation and public awareness in disaster mitigation. *Disaster Prevention and Management: An International Journal, 12(1),* 33-36.

6. Onuma H., Shin, K. J., & Managi, S. (2016). Household preparedness for natural disasters: Impact of disaster experience and implications for future disaster risks in Japan. *International Journal of Disaster Risk Reduction.*

7. Revi A. (2008). Climate change risk: an adaptation and mitigation agenda for Indian cities. *Environment and Urbanization, 20(1),* 207-229.

8. Sekar K., Bhadra S., Jayakumar C., Aravind Raj E., Henry G., and Kumar, K.V.K.(2005a). *Psychosocial care in disaster management. Facilitation manual for trainers Trainees in natural disasters.* Bengaluru:NIMHANS.

9. West C., Woods, C., Casella, E., & Usher, K. (2015). *Disaster Preparedness: community preparedness & impact:2013–2014 tropical cyclone season (Vol.2)*: James Cook University.

10. Yesmin F., & Baruah, R. (2014). Tackling disasters... Are we prepared? *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine, 40*(1), 67-68.

Mental Health Intervention for Test Anxiety among Adolescents

[1]D Febina V. Rahoof, [2]Renjith R. Pillai

Abstract

Introduction

Teenagers in India are obsessed with their grades and some teenagers are so wrecked by anxiety that they become ill. Anxiety is inversely proportional to the performance in examinations. Low motivation level, high expectation and pressure from parents, lack of preparation, quality of the teaching and teacher, interest in the subject and so on are believed to be few causative factors for the test anxiety. The present study aims to screen teenagers with test anxiety and provide them with social work interventions to address the same.

Methodology

A survey was done among 76 ninth grade students of Government Higher Secondary School from Periye, Kasargod, Kerala using the screening tool, Westside Anxiety Scale (Driscoll, 2010). Thirty (30) teenagers identified with test anxiety were recipients of an intervention with a package developed by the researchers prepared through extensive literature review and face validation with the help of experts. Pre and post effectiveness of the programme was measured using a questionnaire designed for the purpose. The profile of the participants was collected using a socio-demographic sheet. The study was approved by the Research Committee of the Department of Social Work, Central University of Kerala. The pilot and main study was completed in December 2016. Consent for participation was taken for the study.

Results and Conclusion

The effectiveness of the training on the knowledge level was evident on the analysis. It showed that there was a significant improvement in the level of knowledge related to test anxiety ($t=-7.459$, $p<0.05$), causes of test anxiety ($t=-9.799$, $p<0.05$), in healthy study habits ($t=-12.158$, $p<0.05$), preparations ($t=-9.570$, $p<0.05$) and relaxation techniques ($t=-10.333$, $p<0.05$). Social Work intervention for test anxiety is thus found to be effective for adolescents and the package can be replicated elsewhere.

Key words: Screening, test anxiety, intervention, effectiveness

[1]M.Phil Trainee, Department of Psychiatric Social Work, NIMHANS, Hosur Road, Bengaluru
E-mail: febinavrahoof@gmail.com
[2]Assistant Professor of Psychiatric Social Work, DDTC, Department of Psychiatry, PGIMER, Chandigarh.
E-mail: renjithpsw@yahoo.com

INTRODUCTION

Children and adolescents with good mental health are able to achieve and maintain optimal psychological and social wellbeing. They have a sense of identity and self-worth and sound family and peer relationship, an ability to learn and the capacity to tackle development challenges and use cultural resources to maximize growth. Moreover, the good mental health of children and adolescents is critical for their active social and economic participation (WHO, 2005).

The obsession with 'numbers' or high grades is so rampant in India that some teenagers are wrecked by anxiety and become ill. In spite of being a state with the highest literacy rate across the country, Kerala reports high suicide rates among teenagers related to performance and failures in examinations. As per the statistics available with Ministry of Health, Government of India, 2010 students in 2009 and 2381 students in the year 2011 committed suicide due to failure in examinations (Sengupta, 2015).

Anxiety is inversely proportional to the performance in the examinations. There are several causative factors for the test anxiety such as low motivation level, high expectation and pressure from parents, lack of preparation, quality of the teaching and teacher, interest in the subject and so on. There is a dire need to address these identified causes, assist teenagers to manage their examination stress, instill confidence and enhance their performance thereby bringing overall success to their life.

REVIEW OF LITERATURE

Anxiety is a psychological and physical response to treat a self-concept characterized by subjective, consciously perceived feeling of tension (Spielberger, 1983). It is widely accepted that anxiety within certain limits enhances performance. However, a high level of anxiety is negatively related to achievement (Kapadia, 1974) and performance. Test anxiety is clearly becoming more prevalent among adolescents in our society. According to Ergene (2003) the test anxiety before the annual exams is due to poor preparations. Many students do not know how to study leading to inadequate preparations. The academic sources of stress appeared to be the most stressful for all the students due to the pressure that originated from the course overload and the academic evaluation procedures. A variety of personal, familial (Putwain, Woods & Symes, 2010) and social factors are also identified as causes for test anxiety. The academic stress can be reduced if the parents have a good relationship with their children, i.e., parents' warmth and care

is very important in terms of reducing test anxiety and academic stress (Andrew et.al, 2015). Test anxiety affects school students the most, test anxiety is an integral part of the school students (Jhonson, 1979). The study habits of the students play a vital role in terms of test anxiety i.e. the pre examination behavior of students have a perilous effect on test anxiety (Wittmaier, 1972). According to Aydin (2009), the teacher's attitude and attitude of the student towards teacher is also an important factor in managing test anxiety i.e. if the teacher has a positive attitude towards the student and vice versa then the anxiety level will be low. The study also says that the students who have a good previous test history will not have a high level of test anxiety. According to Lal (2014) there is no difference between the test anxiety level of students having an average or low IQ in comparison with students with high IQ; there is no significant difference in the test anxiety level between the students from urban or rural area and among the students from Government or Private schools but there is a difference among male and female students, i.e. female students have a slightly higher anxiety level than the male students. The working memory of students with high and low anxiety levels has a massive impact on their performances, the relationship with the accuracy and worry level of the students with test anxiety is also inversely proportional, according to Lee (1999).

METHODOLOGY

Research Design

The primary aim of the study was to screen the teenagers with test anxiety and provide them with social work intervention in minimizing the same. It adopted a quasi-experimental research design, where there was an intervention group without any control group. The participants of the study and intervention programme were 9th grade students of Government Higher Secondary School, Periye, Kasargod, Kerala.

The design included screening the students for test anxiety, identification of 30 students with test anxiety, preparation of an intervention package and evaluating the effectiveness of the intervention using a specially prepared questionnaire. The research proposal which was a part of the postgraduate training in Social Work was approved by the Research Committee of the Department of Social Work, Central University of Kerala, Kasargod prior to the initiation of the study. The pilot and main study was conducted in the month of December, 2016. Modifications of the evaluation questionnaire were done based on the inputs from the pilot study conducted on five students.

Tools for data collection

A. **Socio-demographic data sheet:** Profile of the respondents such as name, age, type of family, parents' occupation economic status and domicile was collected using the same.

B. **West Side Anxiety Scale:** is a short ten item scale made for screening students with test anxiety. The items are related to self-assessed anxiety impairment and cognitions which can impair performance. (Driscoll, 2007)

C. **Self-prepared Questionnaire:** was used to evaluate the effectiveness of the intervention before and after the programme. The items of the questionnaire include the level of knowledge related (a) test anxiety(b) causes of test anxiety (c) healthy study habits (d) preparations and (e) relaxation techniques, rated on a 5 point scale with '1' indicating least level of knowledge and '5' indicating highest level of knowledge.

Process of Intervention and Data Collection

Informed consent was taken from all the participants before collecting relevant information. Subsequently screening among the 76 students were done and 30 teenagers among them who fulfilled "high test anxiety" and "extremely high test anxiety" conditions were considered for the study i.e. those who scored more than 3.5 were selected using lottery method. Socio-demographic details were initially collected. With the self-prepared questionnaire, a pre-test was done to know the level of knowledge on various items of the package before the intervention. Subsequently, the intervention was given. Multiple methodologies such as lectures, discussion, free-listing, demonstration and practice sessions were adopted for the programme. A post-test using the same questionnaire to rate the change after the intervention was done. Both these findings were compared to check the effectiveness of the intervention package.

Contents of the Intervention Package

The outline of the Intervention Programme (Table 1) was prepared based on literature reviews and inputs from the school teachers. Psycho-education, problem-solving and stress management approaches were a part of the package and a participatory training methodology was adopted. The content validation was done with the help of experts in the field. Modifications were made based on the inputs from the experts and final approval was taken.

Table 1: Contents of the intervention package

Sl. No	Contents		Methodology	Expected Outcome
	Theme	Sub-Theme		
1	Test Anxiety	• Concept • Signs and Symptoms	Lecture / Free listing	Understand the definition and meaning of test anxiety
2	Causes of test anxiety	• Fear of failure • Poor preparations and test history • Lack of self-control and interest • Parental as well as peer pressure • Poor time management and study habits • Negative and perfectionist thoughts	Lecture / Discussion	Learn the causes of test anxiety
3	Reducing test anxiety	• Attitude, diet motivation, rest, physical exercise • Attention and listening • Monitoring • Tackling the causes	Lecture / Discussion	Learn the methods to reduce anxiety.
4	Preparations and study habits	• Action plan • Time budgeting • Space test reviews • Making points • Reviewing, recopying reorganizing • Study groups and guides • Organizing information • Memorizing	Discussion / Activities / Demonstration	Learn and practice healthy study habits
5	Relaxation techniques	• Long term relaxation technique • Short term relaxation technique	Lecture / Practice Session	Learn relaxation techniques and stress management
6	In the examination hall	• Dos and Don'ts	Chart Presentation	Learn dos and don'ts

RESULTS

Table 2: Analysis of the screening test for Test Anxiety

Sl. No	Range	Category	No.of students (N)	Percentage (%)
1	1.0—1.9	Comfortably low test anxiety	3	4
2	2.0—2.5	Normal or average test anxiety	2	2.6
3	2.6—2.9	High normal test anxiety	15	19.7
4	3.0—3.4	Moderately high test anxiety	16	22.36
5	3.5—3.9	High test anxiety	23	28.94
6	4.0—5.0	Extremely high test anxiety	17	22.36

A total of 76 students were screened for test anxiety. Results shows that 4% of the students had comfortably low test anxiety and another 2.6% had normal or average test anxiety well within the normal range. A total of 19.7% of the respondents had high normal test anxiety, slightly higher from the desired eustress. Also, 22.36% of the total respondents came under the category of moderately high test anxiety. A little more than 1/4th of the respondents (28.94%) came under the high test anxiety category while 22.36% came under extremely high test anxiety category.

Table 3: Profile of the participants of the Intervention Programme

Sl. No	Variables	Category	Frequency (%)
1	Gender	Male	22(73.33)
		Female	8(2.66)
2	Economic Status	BPL	3(10)
		APL	27(90)
3	Family Type	Joint	9(30)
		Nuclear	21(70)
4	Occupation of father	Government	1(3)
		Private	28(93.33)
		Not Working	1(3)
5	Occupation of mother	Government	1(3)
		Private	3(10)
		Not Working	26(86.66)
6	Domicile	Rural	29(96.66)
		Semi Urban	0
		Urban	1(3.33)

The mean age of the participants in the study was 14 years. Out of the total respondents only 2.6% were females. A total of 90% participants belonged to "above poverty line" category. A majority (70%) of the participants were from nuclear families. It was seen that 93.3% fathers of the respondents worked in private sector. A vast majority (86.6%) of the mothers were not working. The domicile of all with the exception of one respondent was rural.

Table 4: Effectiveness of the intervention programme for Test Anxiety

Sl. No	Item	Mean Score		't' value	'p' value
		Pre	Post		
1	Knowledge about test anxiety	2.37	4.10	-7.459	< 0.05
2	Knowledge about the causes of test anxiety	2.13	4.07	-9.799	
3	Knowledge about healthy study habits	1.63	4.00	-12.158	
4	Knowledge about the preparations	2.07	4.07	-9.570	
5	Knowledge about relaxation techniques	1.80	4.07	-10.333	

Table 4 shows that the mean score for the item "knowledge about test anxiety" was 2.37 before intervention. It significantly ($t=-7.459$, $p<0.05$) rose to 4.10 after the intervention. There was a significant increase ($t=-9.799$, $p<0.05$) in the level of knowledge among the participants of the programme on the causes of test anxiety wherein the pre mean score was 2.13 and the post mean score was 4.07. A significant increase ($t=-12.158$, $p<0.05$) in the level of knowledge related to healthy study habits too was seen (Pre-mean score:1.63; Post-mean Score: 4.00). There was a significant increase in the level of knowledge related to the exam preparations (Pre-score: 2.07; Post-score: 4.07; $t=-9.570$, $p<0.05$) and relaxation techniques (Pre-score: 1.80; Post-score: 4.07; ($t=-10.333$, $p<0.05$).

DISCUSSION

The universe of the study was a rural government school that explains the predominance of students from the rural background in the current study. Higher participation of male teenage students with test anxiety in the study could be due to the cultural element of typical parents in our country who have high expectation about their teenage sons that they will perform well in their studies, get good grades and a good job in the future.

The present study brought to light the fact that more that 90% of the participants have test anxiety in varied intensity. It has been already reported in varied studies (Culler & Holahan, 1980; Dendato & Diener, 1986; Musch & Bröder, 1999) that test anxiety can adversely affect the performance of the students. A low exam performance can lead to low self-esteem (Sudheesh & Renjith, 2016), suicides/suicidal attempts, depression (Sharp, 2013) and so on. Periodical assessments and programmes to address the anxiety are thus very much essential in the schools. Teachers and school counsellors need to be sensitive and can play a pivotal role in addressing the test anxiety of the students through such assessments and programmes.

It is strongly advised to have school counsellors with exposure to individual and group intervention approaches at the schools The basic knowledge and skills about techniques like cognitive restructuring and relaxation techniques are very helpful in terms of reducing test anxiety, the deep breathing relaxation technique was also found useful in terms of reducing test anxiety (Akinsola & Nwajei 2013). The parents also need to be trained to support their children in terms of test anxiety since the parents' care and warmth have significance in reducing test anxiety (Andrew et al., 2015). The counselor can also analyze the social background of the students if needed, then can facilitate modification of the environment of the students by addressing their parents and can make the environment healthier so that the student could feel comfortable.

The intervention package comprising the contents (a) test anxiety (b) causes of test anxiety (c) healthy study habits (d) exam preparations (e) relaxation techniques and (f) Dos and Don'ts in the exam hall was found to be useful and effective for the participants. The contents in the intervention package are arranged in such a way that the student could understand it easily and also comprised of the solutions to the causes too. The effectiveness of the intervention was evident from the pre and post results of the intervention. The multiple methodologies adopted for the implementation had made the learning easy and understandable.

LIMITATION OF THE STUDY

The study was done among the students who have scored 3.6 and above in the screening test. The students who have scored more than 2.6 also should have been included for intervention. But in order to restrict to sample size to 30, the researcher included only the students with high test anxiety. A second limitation is that the researcher has only

given one intervention session for the respondents. Handholding sessions will have to be undertaken in future to ensure the sustainability of the intervention. And finally, change in the level of test anxiety needs to be assessed and ascertained after a mid-term examination in the school.

CONCLUSION

The present study brings to light the severity of test anxiety among adolescent's school children in Kasargod District, Kerala. The teenagers have high levels of test anxiety as has been identified in this study; the causative factors identified by the researcher are relevant. The intervention package developed by the researcher was found to be effective in addressing the issue. Assessing and addressing the test anxiety among the adolescents should be a part of school mental health programmes.

REFERENCES

1. Andrew S. Quach, Norman B. Epstein, Pamela J. Riley, Mariana K. Falconier and Xiaoyi Fang (2015). Effects of Parental Warmth and Academic Pressure on Anxiety and Depression Symptoms in Chinese Adolescents. Journal of Child and Family Studies. 24(1), 106–116.

2. Wittmaier, B. (1972). Test Anxiety and Study Habits, Test Anxiety and Study Habits. The Journal of Educational Research. 65(8), 352-354

3. Culler R. E. & Holahan, C. J. (1980). Test anxiety and academic performance: The effects of study-related behaviors. Journal of Educational Psychology, 72, 16-20

4. Dendato K. M. & Diener, D. (1986). Effectiveness of cognitive/relaxation therapy and study-skills training in reducing self-reported anxiety and improving the academic performance of test-anxious students. Journal of Counseling Psychology, 33, 131-135.

5. Ergene T (2003). Effective interventions on test anxiety reduction. School Psychology International, 24, 313–328

6. Ergene T (2011).The Relationships among Test Anxiety, Study Habits, Achievement, Motivation, and Academic Performance among Turkish High School Students

7. Akinsola E., Nwajei A.D. (2013). Test Anxiety, Depression and Academic Performance: Assessment and Management Using Relaxation and Cognitive Restructuring Techniques. Scientific Research. 4(6A), 18-24.

8. Aydin S., MelihKarakuzu & GencerElkiliç (2009).Teacher Effect on the Level of Test Anxiety among Young EFL Learners. Available from the URL: https://www.researchgate.net/publication /237110516_Teacher_Effect_on_the_Level_of_Test_Anxiety_among_Young_EFL_Learners

9. Johnson S. B. (1979). Children's fears in the classroom setting. School Psychology Digest, 8, 382–96

10. Lee H. J. (1999). Test Anxiety and Working Memory. The Journal of Experimental Education , 67(3), 218-240.

11. Kapadia J. J. (1974). Relationship between personality variables and achievement of pupils on programmed learning material. In Gunvant Shah (Ed.) Studies in programmed learning. Anand, Gujarat: Charotar Educational Society.

12. Lal K. (2014) Academic Stress Among Adolescent In Relation To Intelligence And Demographic Factors. American International Journal of Research in Humanities, Arts and Social Sciences. AIJRHASS, 5(1), 123-129.

13. Musch J. & Bröder A. (1999). Test anxiety versus academic skills: A comparison of two alternative models for predicting performance in statistics exam. British Journal of Educational Psychology, 69,105-116.

14. Putwain D.W., Woods K.A., & Symes, W. (2010). Personal and situational predictors of test anxiety of students in post-compulsory education. British Journal of Educational Psychology, 80, 137-160

15. Driscoll R. (2007). Westside Test Anxiety Scale Validation. Available at: https://eric.ed.gov/?id=ED495968

16. Sengupta P . (2015). India and China has more than one link: Exam stress and student suicides. Available at: http://www.oneindia.com/feature/india-and-china-exam-stress-student-suicides-1761728.html

17. Sharp A. (2013). Exam culture and suicidal behaviour among young people. Education and Health, 31(1), 7-11.

18. Spielberger C. D. (1983). Manual for the State-Trait Anxiety Inventory Palo Alto, CA: Consulting Psychologists Pres.

19. Sudheesh K & Renjith R. P. (2016). Self-esteem and Academic Performance among Tribal students. Unpublished dissertation from the Department of Social Work, Central University of Kerala.

20. WHO. (2005) Child and Adolescent Mental Health Policies and Plans. Available at : http://www.who.int/mental_health/policy/Childado_mh_module.pdf

Marriage Expectations of Rural Youth in Karnataka- Need assessment for Marriage Preparation Programme

[1]Krupa A.L and [2]Bino Thomas

Abstract

Background: Increasing rates of divorces and acceptance of remarriages have brought varied dynamics in Indian families. Divorces impact the children and leaves scars of trauma on individuals who go through. Mostly Indians believe and practice in one marriage for a life time; hence individuals getting into it have to prepare for it before committing to it. Studies have focused on urban population on marriage preparatory programmes. Research studies on marriage expectations of rural youth seem to be lacking in the Indian context. Therefore the paper identifies the expectations of the rural youth to see if they could be helped through marriage preparatory programmes.

Methodology: Using a convenient sampling method within a mixed methodology research design, 120 rural youth studying in a degree college in Kolar District of Karnataka State, India were recruited. Marriage expectation scale and an additional marriage expectation questionnaire were administered. A semi structured questionnaire also was administered to elicit specific marital expectations among the rural youth. Data was analysed using R software and thematic analysis. The Ethics Committee approval from the Institute was received.

Results: The results showed that 50% (N = 60) male and 50% (N = 60) female adolescents participated in the study. The median age of rural youth was found to be 21 years.: 27.5% (N = 33) had pessimistic views about marriage, 50.8% (N = 61) had realistic view of marriage and 21.7% (N = 26) expressed idealistic view. It was also noted that, participants wanted to know about marriage (89.29±11.19), had certain expectations from partner (48.10±8.34) and from partner's family (43.65±7.93).

Conclusion: Thus, the current paper concludes that there are potential difficulties that arise from unrealistic and pessimistic expectations from marriage and these may be addressed through a marriage preparation programme for rural youth which would strengthen marital relationships and enhance marital satisfaction.

Key words: Marriage, rural youth, marriage preparation programme.

[1]Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Sciences (INI), Bengaluru. Email: krupa10msw@gmail.com

[2]Asst. Professor of Psychiatric Social Work, Consultant - Child-Adolescent Psychiatry Services NIMHANS, and Marriage preparation programmes-NIMHANS Centre from Wellbeing. Email: binonimhans@gmail.com

INTRODUCTION

Marriage is often viewed as the life transition that solves some problems like loneliness, work/career uncertainty or extended family difficulties. The need to know what this institution is all about, what people expect from their partners, what they expect from the relationship, how they integrate their self and the other in the marital unit, are some major issues that intrigue researchers studying aspects related to marriage. "Marriage is the deepest and potentially the most gratifying of all human relationships, but it's also one of the most demanding. Unfortunately couples seldom have more preparation than a little advice from their parents" (Mace, 1983).

Marriage is a social institution which has its own functions. It is one of the integral parts of a family in society and considered a prerequisite for social order and cultural heritage. Marriage is the most important aspect between two persons, it is a social system and also important component of the social system (Juvva & Bhatti, 2006). Culture differs from one society to another even in the conjugal institution. In India,marriage has been always viewed through the prism of culture, as a coming together of two families, rather than uniting of two individuals. There are love marriages, arranged marriages and semi-arranged marriages. The latter two are most prevalent in India, and the cultural implications suggest that there are different expectations from the marriage relationship in different cultures (Dion & Dion, 1993; Stone, 1990).

Marriage preparation is important and hence courses on marital counselling, seminars and training is essential to prepare the couple for successful marriage and to adjust with it in a better way. Training is based on attitude and their knowledge towards marriage, preventing role conflict and also their expectations towards partner and their relationship. These will be the focus of training (Carroll & Doherty, 2003). Every boy and girl has great and own expectations from marriage (Shivalli, Chitagubbi, & Devendrappa, 2014). Marriage gives scope for the most lasting intimate relationship upon reaching adulthood and mostly stays with the individual till the end of life. Young adulthood is always challenging for all, especially while dealing with issues of intimacy, love, security, status, and well-being.

It is observed that younger couples have more expectations and more issues. It is similar with greater age gap between the couple. The conflict between parents could also negatively impact the child. If the couple is unprepared for parenthood, the child is pulled into troubles (Thomas B 2016e). With growing numbers of those with marital discord, professionals at NIMHANS, Bengaluru contemplated introducing a programme to help adults make the right choice. The programme is aimed at educating

adults on what they could consider while looking for a match, effective communication, preparing themselves for family responsibilities, intimacy including dealing with parental pressures. Marriage preparatory programmes would help one comprehend ill-effects of a compromised choice and learn how to maintain relationship (Thomas. B, Marriage & Family therapist, 2016e, Prajawani, 25 October, 2017a).

A study by Thomas B (2017b) among urban youth who attended a marriage preparation programme (all of them having 16 years of education and above) in Bangalore reported that, 90 (43%) participants expressed that they needed information especially about matters related to sex; thirty-five (16.8%) participants asked for skills in developing and managing the relationship in marriage. 26 (12.4%) wanted to develop conflict resolution skills and 12% (25) of the youth, emotional management. It is also learnt from the youth that they needed information on handling in laws as well.

Henry J and Parathasarathy R (2009, 2010) have looked at the urban Bangalore youth in understanding their needs from marriage and have developed a programme for young adults titled Development of marital and family life education programme for single young adults. This programme has covered aspects of marital expectations, and skill building in interpersonal contexts.

Individuals from diverse cultural, traditional and family values, expectations and life experiences join together in marriage and it becomes important that one gets prepared for a committed relationship. Improved marital quality and decreased distress due to marriage are outcomes of marriage preparation programs (Fawcett 2006, Carroll & Doherty, 2003). Though a major portion of couples these days spend a lot of time, money, and energy in preparing for a wedding, only a few of them start getting prepared for marriage.

Young couples have numerous expectations and concerns pertaining to marriage. Similar is the case with a greater age gap between the couple. Problems will aggravate if they marry undermining all this. Providing counselling and guidelines to address these would be helpful. Some structured programmes are in fact developed and provided to young couples. The programmes conducted at NIMHANS are examples to this. These programmes educate the clients on what they could consider while looking for a match, effective communication, preparing themselves for family responsibilities, intimacy and more. Parenting aspects are also dealt with. As Dr. Bino (2016) mentioned "The conflict between parents could also negatively impact the child. If the couple is unprepared for parenthood, the child is pulled into trouble" The programme would help one comprehend the ill-effects of a compromised choice.

METHODOLOGY

The study aimed at assessing the need for marriage preparation programme for rural young adults by identifying their expectations from marriage, concerns about marriage and their opinion about marriage education programme. Marital expectations are operationalized as those expectations individuals have from marriage, marrying partners, and partner's family members. Marriage preparatory programmes. Using a convenient sampling method within a mixed methodology research design, 120 rural youth studying in a degree collage in Kolar District of Karnataka State, India were recruited. All the selected youth were from rural background; unmarried (girls ≥18 years of age, and boys ≥21 years) and had consented to participate in the study.

Tools: Semi-structured socio-demographic data sheet was prepared by the researcher to assess the socio-demographic details such as age, gender, marital status, religion, domicile and qualification. Marriage expectation scale- MES- (Jones and Nelson, 1996) was used to measure the youth views on marriage expectations. It is a 40 item self reported questionnaire that covered various areas on marriage expectations. For example; my marriage will be deeper than any of my other close relationships, we will both face the same amount of emphasis on sex etc. The scores finally puts participants into 3 levels; pessimistic, realistic and idealistic. Classification of scores 0-85: pessimistic, 86-96: realistic, and 97-120 idealistic. Generally lower scores indicate pessimistic expectations of marriage, higher scores indicate idealistic expectations of marriage while mid scores indicate realistic expectations. Its reliability and validity found to be good.

Additional marriage expectations (Henry. J.A, 2009) was administered to assess domains such as expectations on marriage, partner and partner's family. Additional questions regarding different domains namely Expectations from marriage, Expectations from partner, Expectations from partner's parents have been included to explore areas in marital expectation not included in the scale and these assess high to low of Always agree, Sometimes agree, Rarely agree and Never agree. Except for questions 54, 57, 61, all other questions have reverse scoring of 4 to 1, where 4 indicates high expectations and 1 indicates low expectations. Question numbers 86, 89, 90, 91, 92, 94, 97, 98, 111 has not been scored in this category since they are opinions and do not reflect high or low expectations. They have been analysed separately across the other variables. Additionally, another semi structured questions were used to elicit specific marital expectations and their opinions about marriage education programmes. For example: What would you like to know about marriage? (Relationships, need for premarital preparation programme, perception on marriage).

Method of Data collection: Data was collected in Government First Grade Collage, Kolar, Karnataka. College management gave permission to interview the young adults. One hour sensitization programme was conducted to all the faculty and college management on purpose of the study, need of the study and importance of their support to the researcher prior to obtaining the permission. Participants were able to understand English in terms of filling the questionnaire and clarifications were made in Kannada for those who needed clarifications.

Data analysis: Data was coded, entered and analysed using R Software. For continuous variable mean and standardization and categorical variables frequency and proportions were calculated. For qualitative data simple thematic analysis was used to derive the themes.

Ethical aspects: Informed voluntary written consent was obtained from all the respondents for the study. Participants had freedom to participate in the study or leave, confidentiality was assured and information collected was used only for research purpose.

RESULTS

Table 1: Socio-demographic details of the participants:

Variable		N (%)
Gender	Female	60 (50)
	Male	60 (50)
Marital status	Single	113 (94.2)
	Engaged	7(5.8)
Religion	Hindu	111 (92.5)
	Islam	7(5.8)
	Christian	2 (1.7)
Domicile	Rural	101 (84.2)
	Semi urban	19 (15.8)
Education	Graduate	116 (96.7)
	PG	3 (2.5)
	Others	1 (.8)
Type of family	Nuclear	66 (55)
	Joint	50 (41.7)
	Extended	4 (3.3)

The results (Table 1) showed that 50% (N = 60) male and 50% (N = 60) female adolescents participated in the study. The median age of rural youth was found to be 21 years with standard deviation of 2.24.

Table 2: Descriptive statistics of rural youth marriage expectations scale:

Additional questionnaire domains	N	Mean	Standard deviation
Participants age	120	21.00	2.24
Expectations from marriage	120	81.29	11.19
Expectations from partner	120	48.10	8.34
Expectations from partner's family	120	43.65	7.93

Table 2 shows the views of participants. The descriptive results showed that participants wanted to know about marriage, indicated through the mean score of 81.29 (±11.19), had expectations from partner (with a mean score of 48.10±8.34), and expectations from partner's family (43.65±7.93).

Simple thematic analysis was used to extract the themes from the qualitative data. The common themes that came up were: perceptions on the need for pre-marital counselling; selecting, understanding, adjusting with life partner; and perceptions on marriage:

A few responses from the participants

'I would like to know how to manage marital life with good partner, financial position and also I want to know about marriage and how to maintain our relationships in marriage'.

"My partner should understand my emotional feelings, my family problems, should share his feelings and problems. Therefore, I am responsible to select my life partner"

"I do not think about marriage sometimes; rather think another life is there for me. Every marriage will be gone into rules of government and also we cannot tell anything about marriage. Marriage is created by God".

"Marriage is important aspect in our life and will have enjoyment with parents and other family members and later will have children, Social marriage is very best marriage and also love/arrange marriage.

The quotes of the participants help us to understand that they need information on marriage, skills in managing oneself in marriage, maintaining relationships, one's own emotionality, surrendering of marriages into the hand of God, and role of families in marriage.

DISCUSSION

Less evidences are available on the rural youth's expectations from marriage and its usefulness in developing marriage education programmes for the rural youth. The present study found that the rural youth had presented with major heterogeneity in terms of socio-demographic details such as age, gender, and type of family. Though the study showed that majority had realistic expectations on marriage, there was significant number of young adults in the study who had pessimistic and idealistic expectations on marriage. Having moderate expectations from partners, family of partner and marriage are significant aspects of marriage. This study says that young adults have high expectations from the institution of marriage. The rural youth expressed the need for marriage preparation programme, to understand on partner selection, understanding and adjusting with life partner, and change perceptions and expectations on marriage. This findings highlight that there is a need for getting sensitized or prepared for marriage before it happens to be prepared to deal with challenges marriage brings along with its pleasures. While preparing marriage education programmes for this youth, professionals could highlight ideas of setting realistic expectations from marriage, partner, and family members in addition to several aspects of personal management-social, physical, emotional.

Family intervention is an essential part of psychiatric social work profession. Dysfunctional family contexts have been strongly linked to marital discord etc. Preventive and promotive family intervention may perhaps enable the formation of healthy families (Uday kumar et al, 2007). Social worker facilitates communication between couples, give information and understand about marriage requirement of programme. A social worker's long-term goal is to teach families how to work together to solve and prevent problems. In addition to helping them to resolve their immediate issues in order to marriage, social workers educate them about family dynamics and how they impact both individual members and the family as a whole. Therefore, preparing to marriage life is essential to strengthen the relationships. Thus strengthening the relationship is one of the core components in social work specially working with rural youth.

Limitations of the study:

Data was collected from participants from one college alone, had difficulties in understanding its deeper meaning. The data was collected even when they had not even heard or prepared to answer on marriage preparations. They also had their annual examinations closer and they were preoccupied with that as well. The paper could not bring the specific concerns of those who are engaged and whose marriages are almost going to decided soon after they finish their College.

CONCLUSION

The paper concludes that there is a need for further investigating the core challenges of the young adults in marriages in order to prepare them, help deal with idealistic and pessimistic expectations regarding marriage. One has to be cautious in making conclusions from this initial study about marriage expectations from the limitations and when individual autonomy towards marriage which is still much compromised in rural areas. This study could be first of it is kind focus purely on rural youth and further research could be focused on sensitizing them and preparing marriage education programmes.

ACKNOWLEDGEMENT

This study was carried out when the first author was a student of MPhil (Psychiatric social work) at NIMHANS. We appreciate all the support received from faculties and colleagues from the Department of Psychiatric Social Work, NIMHANS during the research. We thank the College Management for giving permission to proceed with data collection and all other significant people who have supported in this effort.

REFERENCES

1. Carroll, J. S., & Doherty, W. J. (2003). Evaluating the effectiveness of premarital prevention programs: A meta-analytic review of outcome research. Family Relations, 52(2), 105–118. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1741-3729.2003.00105.x/full

2. Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1753-6405.2007.00097.x/full

3. Census India 2001 report. Available at URL:http:/www.censusindia.net.

4. Dion, K. K., & Dion, K. L. (1993). Individualistic and collectivistic perspectives on gender and the cultural context of love and intimacy. Journal of Social Issues, 49, 53–53.

5. Farrokhi, F., & Mahmoudi-Hamidabad, A. (2012). Rethinking convenience sampling: Defining quality criteria. Theory and Practice in Language Studies, 2(4), 784.

6. Ghule, M., Balaiah, D., & Joshi, B. (2007). Attitude Towards Premarital Sex among Rural College Youth in Maharashtra, India. Sexuality & Culture, 11(4), 1–17. https://doi.org/10.1007/s12119-007-9006-6

7. Henry. J.A. (2009). Development of Marriage and Family Life Education Program for Single Young Adults. Dissertation submitted to National Institute of Mental Health and Neurosciences (Deemed University), Bengaluru.

8. Henry, A,J&Parthasarathy R. (2010). Assessment of marital and family expectations of a group of urban single young adults. Indian Journal of Psychological Medicine. 2010; 32(1):42-8. doi: 10.4103/0253-7176.70532.

9. Jones, G. D., & Nelson, E. S. (1997). Expectations of marriage among college students from intact and non-intact homes. Journal of Divorce & Remarriage, 26(1-2), 171–189. Retrieved from http://www.tandfonline.com/doi/abs/10.1300/J087v26n01_09

10. Juvva, S., & Bhatti, R. S. (2006). Epigenetic model of marital expectations. Contemporary Family Therapy, 28(1), 61–72. Retrieved from http://link.springer.com/article/10.1007/s10591-006-9695-2

11. Mace, D. R. (1983). Prevention in family services: Approaches to family wellness (Vol. 904). Sage Publications, Inc.

12. Martin, P. D., Specter, G., Martin, D., & Martin, M. (2003). Expressed attitudes of adolescents toward marriage and family life. Adolescence, 38(150), 359.

13. Puri, S., Dhiman, A., Bansal, S., & others. (2016). Premarital health counseling: A must. Indian Journal of Public Health, 60(4), 287.

14. Shivalli, R., Chitagubbi, G., & Devendrappa, S. (2014). Perception of values of present college youth towards marriage. International Journal of Farm Sciences, 2(1), 153–158. Retrieved from http://inflibnet.ac.in/ojs/index.php/IJFS/article/view/2176

15. Silliman, B., & Schumm, W. R. (2004). Adolescents' perceptions of marriage and premarital couples education. Family Relations, 53(5), 513–520. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.0197-6664.2004.00060.x/full

16. Stone, L. (1990). Road to divorce: England 1530-1987. Retrieved from http://www.popline.org/node/372876

17. Thomas, B. (2017). Marriage & Family therapist, Prajawani, Kannada news paper

18. Thomas, B. (2016). Marriage & Family therapist. Deccan Herald English news paper Pre-marriage Preparatory Programme, 3rd September.

19. Thomas, B. (2017b) Marriage Preparation Program: Expressed Needs of Young Adults. Vinayasadhana, Dharmaram Journal of Psychosocial Formation, VIII (1). 43-56

20. Tania, R. (2010). A study on mental health status and expectation of marriage among college students. Dissertation submitted to NIMHANS (Deemed University) Bengaluru.

21. Udaya Kumar, G.S., Henry. J.A., Thomas, B. (2007). Psychosocial Care for Marital and Family Therapy. In Handbook of Psychiatric Social Work. K.Sekar, R. Parthasarathy, Muralidhar, Chandrasekar. (ed). NIMHANS publication, No 65, Bengaluru.

DECLARATION:

We hereby declare that this study, 'Marriage Expectations of Rural Youth in Karnataka-Need assessment for marriage preparation programme' has been conducted by the first author at the National Institute of Mental Health and Neurosciences (INI) Bengaluru in the year 2015-2017 as part of the research requirements of MPhil Programme in Psychiatric Social Work, under the guidance of, Dr Bino Thomas, Assistant Professor of Psychiatric Social Work, NIMHANS, Bengaluru-560029. We also declare that same content of this paper has not been published in any other Journals.

Effectiveness of Behavioural Management Techniques in Children with Autism Spectrum Disorder and its Implication on Stress Reduction among their Parents

***Prashant Srivastava**

Abstract

Background: Children with Autism Spectrum Disorder (ASD) have a wide range of needs and most exhibit behavioural problems. Around 7-15% of children with ASD have severely challenging behavioural problems. The nature and severity of these behavioural problems vary with the degree of autism spectrum disorder. In children with autism spectrum disorder, the social environment in which they live and interact also shapes their behaviour. Having a child with ASD is stressful for families and the child's behavioural problems can create additional stress and frustration for parents and caretakers. The management of behavioural problems in children with autism spectrum disorder is a great concern.

Aims and Objective: This study aimed to examine the effectiveness of behavioural management provided to children with Autism Spectrum Disorder and its implications on stress reduction among their parents.

Method: 10 Children were included, who were diagnosed with Autism Spectrum Disorder and samples were selected based on Purposive Sampling technique. Some behavioural domains were selected using self-rated behaviour sets (0 to 10) applied with parents for children with Autism Spectrum Disorder to quantify the study subjects' behavioural problems before and after application of behavioural management techniques (pre and post-intervention, respectively) followed with Perceived Stress Scale. The data was analysed using SPSS20 version.

Result: Behavioural management techniques are effective in bringing about changes in the behavioural issues in children with autism as well as reducing stress among their parents.

Keywords: Effectiveness, behavioural management techniques, ASD and Stress Reduction.

*Psychiatric Social Worker, Dept. of Psychiatry, Kalpana Chawla Govt. Medical College and Hospital, Karnal, Haryana and Ph.D Scholar, Dept. of Social Work, Jamia Millia Islamia, New Delhi. Email-Id: 21prashantsrivastava@gmail.com

INTRODUCTION

Autism is a life-long disability which can affect language and communication, social interaction and behaviour patterns of the child. It can vary from person to person, but people with autism share some problems in making sense of the world. First illustrated in a series of case histories by Leo Kanner in 1943, it was not until 1980 that autism was officially recognised as a disorder of development distinct from childhood schizophrenia (American Psychiatric Association, 1994).

Autism is a major developmental disability that affects communication from early life. It involves the inability to express communicative functions and engage in typical social behaviour (Paul, 2001). Major features of Autism Spectrum Disorder (ASD) are evident in three of the following behavioural areas: 1. Social interaction, 2. Language and communication, 3. Restrictive and repetitive behaviour. The rates of behaviour problems among young disabled children and especially children with Autism Spectrum Disorder are three to four times higher than among Non-ASD children (Baker et al., 2002; Baker et al., 2003; Volkmar and Dykens, 2002). These behaviour problems typically continue to persist into later childhood and adolescence (Emerson, 2003) and as the child increases in size, strength and speed, issues become more severe. This puts the child at increased risk of harm and which is difficult for parents and schools to manage. Challenging behaviour is the main reason why children are placed in 38 or 52 week placements in residential schools (Abbott et al., 2000). Gill (2005) found in his study "Parents Whose Children with Learning Disabilities and Challenging Behaviour Attend 52-week Residential Schools: Their Perceptions of Services Received and Expectations of the Future" that apparent parental satisfaction with residential school placements may reflect a substantial improvement in their family situation rather than, necessarily, being a comment on the school and may not be consistent with the experience of their children (Abbott et al., 2001; Morris, 1997). It is also a key factor for families being unable to access short breaks (or respite care), and/or the child being unable to access educational, therapeutic and/or community or social activities (Kahng & DeLeon, 2008). Low levels of skills to manage their child's behaviour are reported by parents, and the severity of the child's behaviour problem has been found to be associated with levels of maternal stress (Baker et al., 2003; Quine & Pahl, 1989). Similar findings were reported by Boyd (2008) and Aite et al. (2006) who stated that all mothers reported a sense of sadness, anger, and worry when knowing that their children have chronic disease. Cohn (1996) and Carey et al. (2002) also reported that the mother of a child with autism experience psychological distress owing to uncertainty and fear for her child's future, and she constantly lives with the anticipation of the child's complication and death.

METHODOLOGY

Aims and Objectives: This study aimed to examine the effectiveness of behavioural management provided to children with Autism Spectrum Disorder and its implications on stress reduction among their parents

Research Design: This study was hospital-based and cross sectional research design was used.

Universe: This study was carried out in the Dept. of Paediatrics, Maulana Azad Medical College, New Delhi after taking Institutional Ethical Clearance

Sample and Sampling: 10 Children with ages ranging between 3 to 12 years who were diagnosed with Autism Spectrum Disorder were included and the sample was selected using Purposive Sampling technique.

Measurements

Some behavioural domains (stubbornness, temper tantrum, hyperactivity, poor social skills and poor communication pattern) were selected using self-rated behaviour sets (0 to 10) and were assessed by parents having children with autism spectrum disorder. This helped to quantify the study subjects' behavioural problems before and after application of behavioural management techniques (pre and post-intervention, respectively) for 6 weeks. Perceived Stress Scale (Cohen and Williamson, 1988) was also used to measure the stress level in parents. This is a 10 items scale which measures stress of a general nature and items are designed to detect how unpredictable, uncontrollable, and overloaded respondents find their lives. It is a five-point scale (0="never", 1="almost never", 2="sometimes", 3="fairly often", 4="very often") with higher scores indicating higher perceived stress. Cronbach's alpha coefficients were 0.74 (Germany), 0.75 (Poland), 0.67 (Bulgaria), 0.50 (UK) and 0.54 (Slovakia).

Data was analysed using SPSS 20 version. Informed consent from the parents was also taken.

Scope of the Study

The interventions delivered as a part of the study will enable to reduce the stubbornness, temper tantrum and hyperactivity as well as to enhance the social and communication skills of a child with Autism Spectrum Disorder. It will also help to reduce the distress and anxiety of the parents using perceived stress scale (Cohen & Williamson, 1988) and

to give awareness regarding the manifestations of Autism Spectrum Disorder, nature, course and progress.

With this background, the objectives of the programme were as follows:

- To establish a firm therapeutic alliance with the parents.
- To educate the parents regarding the manifestations of behaviours of child with Autism.
- To decrease stubbornness, temper tantrums and hyperactivity.
- To improve social skills: eye contact, interaction and playing pattern.
- To improve communication skills.
- To examine the stress among parents having children with Autism Spectrum Disorder

In view of these focus areas, the following interventions were provided.

Psycho-education: The parents were offered psycho education to make them aware of the nature of the illness, course, treatment, prognosis, and to clear any misconceptions about the illness. This was done so that the parents would be in a better position to deal with the illness as they had no hope of the child getting better. Directions to reduce repeated medical consultations and investigations were also provided.

Supportive Psychotherapy: Supportive psychotherapy was aimed at validating the distress the parents were undergoing. The parents are given reassurance, support, and their ability to cope with distress is reinforced.

Behaviour Modification: The behaviour modification was carried out for 6 weeks. The session was continued for 2 hours to decrease stubbornness, hyperactivity and temper tantrums and self-stimulatory behaviour and to improve eye contact, attention and concentration with different materials. The target behaviours and reinforcing situations were identified to continue the therapy program for the betterment of the child.

In addition, some social skills programs for the children with autism included learning on how to act and react in social situations. Basic skills such as developing a sense of self, waiting for their turn, replying to questions, and explaining rules were addressed. This also included communication skills management by addressing the listener pre-emptively to get attention, which is classified under communication skills as well as social skills. This is one of the pre-requisites of communication skills – the fact that

we need to gain the other person's attention before we communicate. Many exercises were planned and implemented to develop this behaviour in the child such as picture exchange communication system using flash cards.

The following process was adopted in delivering the intervention package.

Session 1: The initial sessions involved the pre-assessment of the child's behaviours as reported by the parents. Some behavioural domains like hyperactivity, stubbornness, temper tantrums, poor communication and poor social skills in the children with autism were rated (0 to 10) by the parents. Following this, the Perceived Stress Scale-10 items (Cohen & Williamson, 1988) was administered on the parents to know the level of stress. After the assessments, psycho-education was provided to the parents with the purpose of increasing awareness about the illness. This helped them in understanding how the symptoms began. Firstly the therapist listened to them with care, reassurance and empathy. Supportive psychotherapy was also given to their parents as they were stressed. Supportive measures such as reassurance and persuasion were used and they were asked to support the child's self-esteem.

Session 2: In this session parents were advised with regard to the stubbornness and temper tantrums of the child in order to empower them to reduce these behaviours. Some distraction techniques were taught to parents. The therapist advised parents to engage the child in different activities and not to fulfil all the needs of child and thus reduce over-involvement. The therapist also guided the parents to use reinforcements (positive and negative) for reducing the maladaptive behaviours of the child.

Session 3: A review was held with the parents about the second session. Following this, the behaviour of hyperactivity was targeted. The therapist advised parents to increase the physical activity of their child, in the daily routine, like running, jumping or climbing stairs. Less use of sweetened foodstuff and reduction of the sleep time during the day was advised. Some sedentary activities like table-top play activity, attention improving exercises and games for reducing hyperactivity like statue game were also suggested to parents.

Session 4: After the initial review of the previous session, the therapist informed parents about the fact that in order to enhance social behaviour and competence in children with ASDs, the child's age, developmental level, and peer group need to be considered. This

session intervention included focus on teaching parents on how to engage their child and encourage back-and-forth play and improve eye contact in addition to playing with peers, understanding emotions, and learning the basics of turn-taking and initiating and responding to social interactions. In this session the therapist focused on specific social-behavioural skills (e.g., conversations, greetings, initiating game play, joint attention) and affective understanding (e.g., recognizing emotions in self and others). For improving eye contact the therapist trained the parents to use some techniques such as placing the child in a dark room and moving a candle in front of him from one side to another. Further, whenever the child tugged at the parent's hand for fulfilling his demand they were asked to withdraw and pull back their hands and respond only when the child looked at them to fulfil his demands. The parents followed this method, through which the child learned that he needs to look at the other person before his need is met and parents were also asked to hold the child's head and engage him by talking along with the expressions.

Session 5: This session concluded the interventions focused on improving the communication pattern of the child. Many exercises were introduced and implemented to develop this behaviour in the child. There was a picture exchange communication system in which the communication partner avoids eye contact at one stage. When the child approaches the person with his picture card and taps the person to gain his / her attention, the communication partner looks at the child and then responds to the request. Frequent repetition of the strategy helped the child to understand the importance of gaining the other's attention. In addition, the therapist also taught the parents to increase the maximum vocalization of the child for fulfilment of demands and to reduce fulfilling the demands of the child on only indications. Using of flash cards for effective communication by the child was also taught to the parents by the therapist.

Session 6: In this session they were educated about follow-up and medical adherence. During this session the parents gave feedback and clarified concepts regarding disorders and intervention strategies and the therapist provided corrections and clarifications. After the session the therapist explained the importance of regular practice of the techniques and also advised the parents to practice it on a daily basis with the child. Post-intervention, Self-rating (0-10) as well Perceived Stress Scale was responded to by parents to know the effectiveness of behavioural management techniques in children with autism spectrum disorder.

RESULTS

Table 1: Statistical Mean Age of the samples

VARIABLES	MEAN	STANDARD DEVIATION
Age (in years)	3.90	0.73

Table 1 suggests that the mean age of the children with Autism Spectrum Disorder is 3.90 years.

Table 2: Statistical analysis of the socio-demographic variables of the sample

VARIABLES		FREQUENCY	PERCENTAGE (%)
Sex	Male	6	60
	Female	4	40
Family Type	Nuclear	7	70
	Joint	3	30
Socio-Economic Status	Low	3	30
	Middle	6	60
	High	1	10
Religion	Hindu	6	60
	Muslim	4	40

Results show that majority of the children were boys (60%), belonging to nuclear families (70%) and from middle socio-economic status (60%). This reflects the high probability of the parents experiencing high stress in the absence of apt guidance and support.

Table 3: Comparison of the scores in various domains of behaviours, pre and post behavioural management intervention:

VARIABLES	MEAN + SD		Z	P	Imp
	Pre^{M1}	$Post^{M2}$			
Stubbornness	7.70+1.25	6.40+1.57	2.20	0.28*	M1>M2
Temper Tantrums	8.60+0.84	6.10+1.10	2.69	0.007**	M1>M2
Hyperactivity	8.80+1.03	5.80+0.91	2.83	0.005**	M1>M2
Poor Social Skills	8.80+0.78	6.40+0.51	2.83	0.005**	M1>M2
Poor Communication Skills	8.60+0.96	5.70+0.94	2.85	0.004**	M1>M2

* Significant at 0.05, ** Significant at 0.01

Table 3 suggests that there is a significant difference in the domains of stubbornness, temper tantrums, hyperactivity, poor social skills and poor communication skills in the post assessment. Results also suggest that in all behavioural domains mean scores decreased after delivering intervention. This highlights that the interventions were effective in addressing the behavioural issues among the children with autism spectrum disorder.

Table 4: Comparison of scores in stress among parents with children with Autism Spectrum Disorder between pre and post behavioural management intervention

VARIABLES	MEAN + SD		Z	P	Imp
	Pre^{M1}	$Post^{M2}$			
Total Stress	21.50+2.99	17.70+2.35	2.82	0.005**	M1>M2
Poor Communication Skills	8.60+0.96	5.70+0.94	2.85	0.004**	M1>M2

** Significant at 0.01

Table 4 shows significant decrease in parents' stress scores post intervention.

DISCUSSION

This study aimed to examine the effectiveness of behavioural management provided to children with Autism Spectrum Disorder and its implications on stress reduction among their parents. The results indicate that the there is a significant difference in the means of the domains of stubbornness, temper tantrums, hyperactivity, poor social skills and poor communication skills, in the pre and post intervention phase. Marked reduction was also noted in the stress among parents after the intervention phases.

Kaale et. al. (2012) found that behavioural approaches are the most common treatment approaches for ASD. These types of early and intensive treatment programs typically target behaviours and development more broadly, instead of focusing on a specific behaviour of interest (Kasari et. al., 2012). Positive effects seen with these approaches in terms of cognition and language have led to the suggestion that beginning intensive therapy at an earlier age may lead to greater improvements (Ingersoll, 2010; Kasari et. al., 2012, Lawton & Kasari, 2012; Kasari, 2006).

Children with a variety of impairments and risk factors, including those with autism, benefit from early, intensive intervention, with trained providers, using comprehensive, individualized, and ecologically relevant intervention approaches (Ramey & Ramey, 1998). Lord (1995) found that over the past few years, children with ASD are being diagnosed at two years of age. Treatments for autism include behavioural intervention, developmental intervention, and cognitive-behavioural intervention; and these have unique intervention strategies and also have some overlap within these interventions (Corsello, 2005). In a similar study conducted by (Hastings & Brown, 2002) the results suggested that the importance of providing parents with behavioural management skills in order to increase the child's ability and reducing parental stress can be seen in how greatly both the parents and children benefit from it.

CONCLUSION

The Researcher found that administering behavioural management techniques is effective in bringing about changes in the behavioural issues in children with autism, reducing stress among their parents but an ongoing evaluation and treatment process is essential to maintain and generalize the target behaviours attained.

The existing literature on Effectiveness of Behavioural Management Techniques in Children with Autism Spectrum Disorder and its implication on Stress Reduction among their Parents is far from providing any definite answer to questions regarding its effectiveness. This study confirms and adds to our understanding of this issue.

There were a few limitations in this study, which can be addressed in the future researches. The study involved a small sample size due to which generalising may not be possible. A control group could have been used to compare the efficacy of the intervention programme delivered. A formal assessment of the antecedents and consequences affecting the target behaviour was not performed, which would have helped in better identifying the cause of the maladaptive or deficit behaviours. A long-term follow up assessment was not done, which could have given a better idea of the maintenance of the effects of the intervention.

Follow-up studies are needed in the Indian context to identify whether the results obtained are maintained over a long period of time. More controlled studies in which the sample size is large are needed. Comparative studies involving other behavioural interventions will add in the understanding of the efficacy of behavioural management.

Other behavioural dimensions recognised in the present study can be targeted using applied behaviour analysis to identify the efficacy of behavioural management in reducing problem behaviours. Apart from behaviour management techniques, stress management techniques will also be targeted in future for handling severe parenting issues.

REFERENCES

1. Abbott, D., Morris, J., & Ward, L. (2000). Disabled Children and Residential Schools: A survey of local authority policy and practice, *Bristol: Norah Fry Research Centre,* University of Bristol.

2. Abbott, D., Morris, J., & Ward, L. (2001). The Best Place to Be? Policy, practice and the experiences of residential school placements for disabled children,New York, Joseph Rowntree Foundation.

3. Aite, L., Zaccara, A., Nahm, A., Trucchi, A., Iacobelli, B., & Bagolan, P. (2006). Mothers' adaptation to antenatal diagnosis of surgically correctable anomalies. *Early Hum Dev*, 82, 649–653.

4. American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders:* DSM-IV. Washington, DC: American Psychiatric Association.

5. Baker, B.L., Blacher, J., Crnic, K.A. & Edelbrock, C. (2002). Behavior problems and parenting stress in families of three-year-old children with and without developmental delays. *American Journal on Mental Retardation,* 107, 433–444.

6. Baker, B.L., McIntyre, L.L., Blacher, J., Crnic, K., Edelbrock, C. & Low, C. (2003). Pre-school children with and without developmental delay: Behaviour problems and parenting stress over time. *Journal of Intellectual Disability Research,* 47, 217–230.

7. Boyd, M. & Canfield, R. (2008). Stress and mental health. In: Boyd M editor. Psychiatric nursing: contemporary practice. 4th edition. *Philadelphia: Lippincott Williams and Wilkins,* 220–237.

8. Carey, L., Nicholson, B. & Fox, R. (2002). Maternal factors related to parenting young children with congenital heart disease. *J Pediatr Nurs*, 17, 174–183.

9. Cohen, S., Williamson, G. (1988). Perceived stress in a probability sample of the United States. The Social Psychology of Health: *Claremont Symposium on Applied Social Psychology Newbury Park,* 31-67.

10. Cohn, J. (1996). An empirical study of parents' reaction to the diagnosis of congenital heart disease in infants. *Soc Work Health Care* , 23, 67–79.

11. Corsello, C.M. (2005). Early Intervention in Autism. Infants & Young Children, 18 (2), 74–85.

12. Emerson, E. (2003). Prevalence of psychiatric disorders in children and adolescents with and without intellectual disability. *Journal of Intellectual Disability Research, 47,* 51-58.

13. Gill, M.C., Alan, T., & Vivien C. (2005). Parents Whose Children with Learning Disabilities and Challenging Behaviour Attend 52-week Residential Schools: Their Perceptions of Services Received and Expectations of the Future. *British Journal of Social Work,*36(4).

14. Hastings, R. P., & Brown, T. (2002). Behavior problems of children with autism, parental self-efficacy, and mental health. *American Journal on Mental Retardation,* 107(3), 222-232.

15. Ingersoll B. (2010). Brief report: Pilot randomized controlled trial of reciprocal imitation training for teaching elicited and spontaneous imitation to children with autism. *Journal of Autism and Developmental Disorders,* 40(9), 1154-60.

16. Kaale, A., Smith, L. &Sponheim, E. (2012). A randomized controlled trial of preschool based joint attention intervention for children with autism. *Journal of Child Psychological Psychiatry,* 53(1), 97-105.

17. Kahng, S. & Deleon, I. (2008). Behaviour management, in P.J. Pasquale (ed.), Neurodevelopmental Disabilities in Infancy and Childhood. (I): Neurodevelopmental Diagnosis and Treatment, Baltimore: P.H. Brookes.

18. Kasari, C. &Gulsrud, A. & Freeman, S. (2012). Longitudinal follow-up of children with autism receiving targeted interventions on joint attention and play. *Journal of American Academic Child Adolescent Psychiatry*, 51(5), 487-95.

19. Kasari, C., Freeman, S. &Paparella, T. (2006). Joint attention and symbolic play in young children with autism: a randomized controlled intervention study. *Journal of Child Psychological Psychiatry,* 47(6), 611-20.

20. Lawton, K. &Kasari, C. (2012). Brief Report: Longitudinal Improvements in the Quality of Joint Attention in Preschool Children with Autism. *Journal of Autism and Developmental Disorders,* 42(2), 307-12.

21. Lord. (1995). Sensory integrative–based occupational therapy and functional outcomes in young children with pervasive developmental disorders: A Single-Subject Study. *American Journal of Occupational Therapy,* 53(2), 207-213.

22. Morris, J. (1997). 'Gone missing? Disabled children living away from their families', *Disability & Society,* 12(2),241-258.

23. Paul, R. (2001). Language disorders from infancy through adolescence; *Assessment & intervention* (2nd ed.). St. Louis, MO: Mosby Inc.

24. Quine, L. &Pahl, J. (1989). Stress and Coping in Families Caring for a Child with Severe Mental Handicap: A longitudinal study, Kent: Institute of Social and Applied Psychology and Centre for Health Services Studies, University of Kent.

25. Ramey, C.T. & Ramey, S.L. (1998). Early intervention and early experience. *American Psychologist,* 53, 109-120.

26. Volmar, F. and Dykens, E. (2002) .Mental retardation,in M. Rutter and E. Taylor (eds), Child and Adolescent Psychiatry, 4th edition, Oxford: Blackwell.

27. World Health Organization. (1992). The ICD-10 classification of mental and behavioral disorders: Clinical descriptions and diagnostic guidelines. Geneva, Switzerland: World Health.

Parental Bonding among Individuals with Anxiety Disorder and Healthy Controls

[1]Vinit Kumar Singh, [2]Dr. C.R.J. Khess,
[3]Dr. Deepanjan Bhattacharjee, [4]Dr. D Muralidhar

Abstract

Background: Bonding is a mutual and interactive process which differs from simple liking. The relationship between parent and child is the most important relationship of the many different relationships. Parental bonding contains the sense of trust, love, care, and affection between the parents and children. Several etiological models of anxiety have argued the importance of the parent-child relationship as one factor central to the development of anxiety disorders. It has been suggested that the parent-child relationship in anxiety is characterized by low care and an overprotective or over-involved style of interaction. This study aimed to examine the association between parental bonding and anxiety disorder while controlling the factors which have not been controlled by the previous study, such as age, sex and education.

Methodology: This study was a cross-sectional study conducted at an out-patient department of a tertiary care mental health hospital. The sample consisted of 30 patients diagnosed with anxiety disorder as per ICD-10 and 30 healthy controls. The groups were matched for age, sex and education. Parental Bonding Instrument was used for the data collection.

Results and Conclusion: The two groups differed significantly in terms of mother and father care and protection. Low mother and father care ($p<0.000$) and high mother and father protection ($p<0.000$) was found in anxiety disorder as compared to healthy controls.

Key Words: Parental Bonding, Anxiety disorder, Healthy control.

[1]Ph.D. Scholar (PSW), Department of Psychiatric Social Work, NIMHANS, Bengaluru, Karnataka. E-mail: vinitsinghpsw@gmail.com

[2]Director Professor of Psychiatry & In-charge of S.S. Raju Centre for Addiction Psychiatry, Central Institute of Psychiatry, Kanke, Ranchi, Jharkhand.

[3]Associate Professor of Psychiatric Social Work, Department of Psychiatric Social Work, Central Institute of Psychiatry, Kanke, Ranchi, Jharkhand.

[4]Professor, Department of Psychiatric Social Work, NIMHANS, Bengaluru, Karnataka.

INTRODUCTION

Human bonding contains the process of reciprocal and interpersonal relationship between two or more individuals. The relationship between parent and child is the most important relationship of the many different relationships (Steinberg, 2001). Parental bonding contains the sense of trust, love, care, and affection between the parent and child. Theoretical aspects have also emphasized the importance of secure attachment based on the parents' availability, responsiveness and capacity to allow and encourage the child to move progressively (Bowlby, 1977). These theoretical models have also suggested that early insecure relationship between parent-child dispose the child to have anxiety disorder in adulthood. Approximately 20% of children and adolescents are affected by anxiety disorders at sometime in their development, and these symptoms usually maintain in adulthood (Vasa & Pine, 2004).

Several etiological models of anxiety have argued for the importance of the parent-child relationship as one factor central to the development of anxiety disorders (Chorpita & Barlow, 1998). It has also been suggested that the parent-child relationship in anxiety is characterized by low care and overprotective or over-involved style of interaction, while those parents who encourage their child's independence and encourage their child to face difficult situations may reduce the likelihood of their child developing an anxiety disorder.

Though a few attempts were made previously in understanding the influence of parental bonding as one among other causative factors for anxiety disorders, such attempts have not been made in the Indian context so far. This study is a preliminary attempt in that direction looking at the perception of parental bonding among persons diagnosed with anxiety disorder with age, sex and education matched control group.

METHODOLOGY

Study Setting and Participants: This cross sectional study was conducted at the out-patient department of Central Institute of Psychiatry (CIP), Kanke, Ranchi, Jharkhand. The sample consisted of 30 patients diagnosed with anxiety disorder such as generalized anxiety disorder and mixed anxiety and depressive disorder and 30 healthy controls. We have recruited the sample from May 2013 to January 2014 through consecutive sampling method. The diagnosis was confirmed by an experienced Psychiatrist of the CIP as per ICD-10-DCR (WHO, 1993). The patients were included if they were aged between 18

to 50 years; without any comorbidity such as other psychotic disorders, suicidality, neurological disorders or any other medical conditions. Both the groups were matched for age, sex and education.

Procedure: After explaining the procedure of the study the written informed consent was taken from each patient and healthy control. To assess the severity of depression and anxiety, Hamilton Rating Scale for Depression (Hamilton, 1960) and Hamilton Rating Scale for anxiety (Hamilton, 1959) was used respectively. Parental Bonding Instrument (PBI) (Parker, Tupling Brown, 1979) was used to assess the Parental bonding in the Patient group. General health Questioner-12 (GHQ-12) (Goldberg & Williams, 1978) was used to screen the healthy control for psychiatric disorder and those who scored <3 were recruited in the study and they also completed the PBI.

Statistical Analysis: Statistical analysis was performed using SPSS 16.0v. Descriptive Statistics such as frequency, percentage, mean & standard deviation were used to describe the characteristics of the sample. Chi-square/Fisher exact tests were used to examine the differences in the proportion of nominal socio-demographic variables between the two groups. Normality was visually inspected with Q-Q plots. Since, there were no significant outliers we conducted independent sample t test to compare the mean differences between patients and healthy controls on age and education and the study variable parental bonding.

RESULTS

Table 1a: Socio-demographic Characteristics of Participants

Variables		Anxiety Disorder (N = 30) (N / %)	Healthy controls (N = 30) (N / %)	$\chi 2$/Fisher exact test	df	P
Sex	Female	14 (46.7%)	14 (46.7%)	0.000	1	1.00
	Male	16 (53.3%)	16 (53.3%)			
Marital Status	Married	25 (83.3%)	20 (66.7%)	2.222	1	0.136
	Unmarried	5 (16.7%)	10 (33.3%)			

Family Type	Nuclear	11 (36.7%)	18 (60.0%)	3.270	1	0.071
	Joint	19 (63.3%)	12 (40.0%)			
Religion	Hindu	23 (76.7%)	19 (63.7%)	1.270	1	0.260
	Others	7 (23.3%)	11 (36.7%)			
Domicile	Rural	15 (50.0%)	2 (6.7%)	15.332f	2	0.000***
	Urban	10 (33.3%)	13 (43.3%)			
	Sub-urban	5 (16.7%)	15 (50.0%)			
Occupation	Unemployed	17 (56.7%)	10 (33.3%)	21.481f	2	0.000***
	Self-Employed	9 (30.0%)	0 (0.0%)			

Note: *** Significance at 0.001 level (2-tailed), f = fisher exact test used.

Table 1a shows that there was a significant proportion of difference between the groups in terms of domicile and occupation. More number of healthy controls belonged to urban and suburban areas as compared to the patients whereas more number of patients belonged to rural areas. The Table also shows that a majority of patients (56.7%) were unemployed as compared to the healthy controls (33.3%). However, with regard to the other socio-demographic characteristics both the groups were statistically similar.

Table 1b: Socio-Demographic Characteristics of Participants

Variables	Groups N=60		t	df	p
	Anxiety Disorder n=30	Healthy controls n=30			
Age	33.13 ± 8.70	31.70 ± 8.02	.663	58	.419
Education	11.23 ± 2.72	12.26± 2.98	-1.401	58	.781

Table 1b shows that there were no statistical differences between the groups on age and education. Hence, both the groups were similar.

Table 2: Comparison of Parental Bonding between Anxiety Disorder & Healthy controls

Variables			Anxiety Disorder (N = 30) (Mean ± SD)	Healthy controls (N = 30) (Mean ± SD)	t	df	P
Parental Bonding instrument	Mother	Care	27.93 ± 7.22	30.33 ± 1.97	-1.755	58	0.000***
		Protection	14.20 ± 5.11	6.90 ± 2.55	6.995	58	0.000***
	Father	Care	24.96 ± 7.57	29.40 ± 1.90	-3.110	58	0.000***
		Protection	12.96 ± 4.87	6.16 ± 1.80	7.167	58	0.000***

Note: *** Significance at 0.001 level.

Table 2 shows the mean differences in parental bonding between the patient and healthy controls group. The Table shows that the patient group differed significantly in terms of mother care (t=-1.755, p<0.000) and protection (t=6.995, p<0.000) as compared to healthy control's mother care and protection, similarly father care (t=-3.110, p<0.000) and father protection (t=7.167, p<0.000) of the patient group differed significantly to the healthy control's father care and protection.

DISCUSSION

The two groups differed significantly in terms of maternal care and protection. Low mother care and high protection is consistent with the findings of previous studies (Vian & Rabian, 2008; Reitman & Asseff, 2010; Koohsar & Bonab, 2011; Fentz et al., 2011; Picardi et al., 2013). These studies found that low mother care and more overprotection was associated with the anxiety disorder. A vast literature suggests that less warmth, more inter-parental conflict, over-involvement and averseness in childhood may increase the risk of anxiety disorder in adulthood (Yap et al., 2014; Hale, Engels & Meeus, 2006; Parker et al., 1995).

Similarly, patients with anxiety disorder groups reported low father care and high father protection than healthy control group. These findings are also consistent with

the previous study done by Alnes and Torgersen (1990), Vian and Rabian (2008), Cassidy et al. (2009), Koohsar and Bonab (2011). The literature suggests that improper parenting and insecure parental bonding may increase the likelihood of anxiety disorders. Picardi et al. (2013) also suggested that persons who reported low father care and high protection are at risk for anxiety disorder.

As per socio-demographic variables the two groups differ significantly only in terms of domicile and occupation (refer to Table 1), because the participants of the healthy control group were recruited from a neighboring area of the study place. Since the study place (Central Institute of Psychiatry, Kanke, Ranchi, Jharkhand) is situated in a sub-urban area and very near to Ranchi city, participants (Healthy Control) had better opportunities of employments whereas the anxiety disorder group comprised people availing treatment/care for their anxiety related problems. It is more likely that the condition for which they were seeking treatment itself could have resulted in dysfunction and impacted their chances of being employed. Since this hospital catered to the mental health needs of those who were financially weak from far off places, a majority of them had a rural background. While selecting the participants for both the groups, they were matched on age, sex and education, so no significant differences were found between the groups on these variables.

To the best of our knowledge, it was the first study from India which looked into parental bonding as one among many other variables which might have an influence on the etiology of the anxiety disorder. Though similar studies were conducted elsewhere with different clinical population like Obsessive Compulsive Disorder, Depressive Disorder etc (Parker et al., 1995; Koohsar & Bonab, 2011), some of the important socio demographic variables like age, sex and education were not controlled. These socio-demographic variables could be the confounding variables, which could color the findings of the study since those variables can influence the way people perceive their parenting.

Though our study had several strengths to its credit, the limitations of the study also need to be acknowledged. Since our study mainly used the retrospective report of the participants on their perception of parental bonding, the influence of recall biases on the study results could not be avoided. The cross-sectional nature of the study and small sample size also limited the generalizability of the study.

CONCLUSION

The findings of the current study support the evidence from the previous studies highlighting the crucial role of parental bonding in the etiology of anxiety disorder and add to the existing scientific evidence. Parenting programs to strengthen the healthy bonding between parents and child can be initiated to prevent the risk of children developing anxiety disorders in the later part of their lives.

REFERENCES

1. Alnes, R., & Torgersen, S. (1990). Parental representation in patients with major depression, anxiety disorder and mixed conditions. *ActaPsychiatricaScandinavica, 81*(6), 518-522.

2. Bowlby, J. (1977). The making and breaking of affectional bonds. I. Aetiology and psychopathology in the light of attachment theory. An expanded version of the Fiftieth Maudsley Lecture, delivered before the Royal College of Psychiatrists, 19 November 1976. *The British Journal of Psychiatry,* 130(3), 201-210.

3. Cassidy, J., Lichtenstein-Phelps, J., Sibrava, N. J., Thomas Jr, C. L., &Borkovec, T. D. (2009). Generalized anxiety disorder: Connections with self-reported attachment. *Behavior Therapy,* 40(1), 23-38.

4. Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: the role of control in the early environment. *Psychological Bulletin,* 124(1), 3-21.

5. Fentz, H. N., Arendt, M., O'Toole, M. S., Rosenberg, N. K., &Hougaard, E. (2011). The role of depression in perceived parenting style among patients with anxiety disorders. *Journal of anxiety disorders,* 25(8), 1095-1101.

6. Goldberg, D. & Williams, P. (1978). *Manual of the General Health Questionnaire*. SLOUGH; NFER.

7. Hale III, W. W., Engels, R., &Meeus, W. (2006). Adolescent's perceptions of parenting behaviours and its relationship to adolescent Generalized Anxiety Disorder symptoms. *Journal of Adolescence*, 29(3), 407-417.

8. Hamilton, M. (1959). The assessment of anxiety states by rating. *British journal of medical psychology,* 32(1), 50-55.

9. Hamilton, M. (1960). A rating scale for depression. *Journal of neurology, neurosurgery, and Psychiatry,* 23(1), 56-62.

10. Koohsar, A. A. H., &Bonab, B. G. (2011). Relation among quality of attachment, anxiety and depression in college students. *Procedia-Social and Behavioral Sciences, 30*, 212-215.

11. Parker, G., Hadzi-Pavlovic, D., Greenwald, S., &Weissman, M. (1995). Low parental care as a risk factor to lifetime depression in a community sample. *Journal of affective Disorders, 33*(3), 173-180.

12. Parker, G., Tupling, H., & Brown, L. B. (1979). Parental Bonding Instrument (PBI). *British Journal of Medical Psychology, 52*, 1-10.

13. Picardi, A., Caroppo, E., Fabi, E., Proietti, S., Di Gennaro, G., Meldolesi, G. N., &Martinotti, G. (2013). Attachment and Parenting in Adult Patients with Anxiety Disorders. *Clinical Practice and Epidemiology in Mental Health: CP & EMH, 9,* 157-163.

14. Reitman, D., &Asseff, J. (2010). Parenting practices and their relation to anxiety in young adulthood. *Journal of Anxiety Disorders, 24*(6), 565-572.

15. Steinberg, L. (2001). We know something. Parent-adolescent relationship in retrospect and prospect. *Journal of Research on Adolescence, 11*(1), 1–19.

16. Vasa, R. A., & Pine, D. S. (2004). Neurobiology. *Anxiety disorders in children and adolescents* (2nd Ed.). New York: Guilford Press.

17. Viana, A. G., &Rabian, B. (2008). Perceived attachment: Relations to anxiety sensitivity, worry, and GAD symptoms. *Behaviour Research and Therapy, 46*(6), 737-747.

18. World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research*. Geneva: World Health Organization.

19. Yap, M. B. H., Pilkington, P. D., Ryan, S. M., & Jorm, A. F. (2014). Parental factors associated with depression and anxiety in young people: A systematic review and meta-analysis. *Journal of affective disorders*

Stress and Social Issues among Caregivers' of Endosulfan Victims in Kasaragod District, Kerala

[1]Sreeshna Krishna K C, [2]Renjith R Pillai

Abstract

The purpose of this paper is to study the level of stress among the caregivers of endosulfan victims and the social issues faced by them. The descriptive study was undertaken at Pullur-Periye and Enmakaje Panchayaths in Kasaragod District, Kerala. Thirty (30) caregivers of endosulfan victims were selected using snowball sampling method. The tools used for data collection were (1) Socio-demographic sheet to collect the profile of the participants (2) Perceived Stress Scale (Cohen, 1983) and (3) a semi-structured interview schedule prepared to assess the social issues faced by caregivers of endosulfan victims. With the clearance of the study from the Department of Social Work, Central University of Kerala, the study was completed in the month of December, 2017. An analysis showed that 66.7% caregivers experienced a high level of stress and another 33.3% a lower level of stress. Participation in social functions was reported by 30% respondents. Perception of complete isolation from the society and financial problems were reported as 'severe' by 10% respondents. Respondents who weren't completely aware of the welfare schemes of the state government for endosulfan victims constituted 40%. It was reported by 60% respondents that they had faced difficulties in availing welfare schemes. Caregivers of the endosulfan victims are seen to be severely stressed and experience multifarious social issues both requiring attention. A need for a comprehensive psychosocial care programme is the need of the hour that shall take care of both physical and psychological needs of the respondents.

Key words: Stress, Social issues, Caregivers, Endosulfan victims

[1]Alumna, Department of Social Work, Central University of Kerala, Tejaswini Hills, Periye P.O., Kasaragod. E-mail: kcsree19@gmail.com

[2]Assistant Professor of Psychiatric Social Work, DDTC, Department of Psychiatry, PGIMER, Chandigarh. E-mail: renjithpsw@yahoo.com

INTRODUCTION

Ariel spraying of endosulfan (Rajendran, 2002) and its impact is considered as one of the worst pesticide disaster in human history. Kasaragod district in Kerala, India has borne the brunt of this pesticide. In two decades (1976-2000), more than 50,000 villagers of Kasaragod district have been exposed to Endosulfan pesticide sprayed over the cashew trees in the Plantation Corporation of Kerala. The impact of the application of the pesticide in the agricultural field without proper monitoring was a decline in plant diversity between 40 to 70 percent, particularly for native species, compared to the natural habitat and it also resulted in various health problems among the community. By 1990,many health disorders among the local people of Kasaragod were evidently seen. People were afflicted with various chronic illnesses, many of which were irreversible and difficult to treat. Though, at the Stockholm Convention, India agreed to discontinue the usage of Endosulfan by 2017 (Deccan Herald, 2014), people are still dying from after-effects of the pesticide.

Most of the endosulfan victims are affected with chronic illnesses. The brunt of illnesses is borne by the caregivers (family members, the relatives or a paid person) who provide physical and mental support to the patient. Most of them are dependent on others for physical, mental and financial supports. In most of the cases family members are the caregivers; in a few cases they provide full time care to the patient resulting in stress. Social issues further aggravating the situation are not uncommon.

Kulkarni et al. (2014) in a study among chronic cancer patients found the overall stress level to be 5.18 ± 0.26 (on a scale of 0-10). They concluded that chronic illness resultant caregiver stress is a public health issue and failure to address it adequately can drastically impact the quality of attention and care provided to the patient. Research studies also show that care giver stress has links with social support systems; the latter moderates the caregiver's psychological distress (Ergh et al., 2002). Formal support also acts as a mediator in care givers (Winslow, 1997).

Prolonged treatment and tests for the survivor induce a financial burden among the caregivers (Lim, 2004) resulting in stress. Studies shows that caregivers perceive that there is a stigma due to the illness of the survivors. Tilahun (2016) in his study among caregivers of children with intellectual disabilities found that most caregivers experience a stigma; worries of being treated differently, shame and effort to keep the child's condition a secret were reported. Lack of care-related knowledge, fatigue, and sleep disturbance, and a high level of anxiety, stress, and social isolation were reported by caregivers of patients with heart failure (Bahrami, 2014)

The stress among the caregivers of endosulfan victims and the related social issues are to be studied, documented and utilized for enhancing the quality of their life.

METHODOLOGY

The major aim of the present study was to understand the stress experienced by the caregivers of endosulfan victims and the social issues encountered by them. The researcher adopted descriptive research design for this quantitative research. Thirty (30) caregivers of endosulfan victims were selected by using snow ball sampling method from Pullur-Periye and EnmakajePanchayaths in Kasaragod District.

Tools used for data collection

(1) Socio-Demographic sheet: This was intended to collect the profile of the participants such as name of victims and caregivers, age, sex, education, marital status, religion, category, number of disabled persons in the family, relationship with victim and occupation.

(2) Perceived Stress Scale (Cohen, 1983): A 10-item scale was used for assessing stress of the caregivers. The feelings and thoughts of the respondents during the last month was assessed using this scale. For each question, respondents need to choose from the alternatives: 0. never 1. almost never 2. sometimes 3. fairly often 4. very often. PSS-10 scores are obtained by reversing the scores on the four positive items, e.g., 0=4, 1=3, 2=2 and then summing across all 10 items. Items 4,5, 7, and 8 are the positively stated items. Validity and reliability is shown to be good.

(3) A Semi-Structured Interview Schedule: This was intended to assess the social issues faced by caregivers of endosulfan victims. It had questions related to support from government and experiences in the society at large, financial issues and perceived stigma. The face validity of the schedule was done with the help of the experts and suggestions were incorporated before finalising the instrument.

All the tools were translated into the regional language (Malayalam from English) for better understanding. Translation and back translation was done with the help of experts well versed in both the languages. The Research Committee of the Department of Social Work, Central University of Kerala approved the study. Consequent to the approval, a pilot test (sample size=3) was undertaken to check the appropriateness of the tools used in the study. Modifications were made in the process of the study based on

the inputs of the pilot study. Informed consent was taken from the respondents before the data collection. It was explained to the respondents that their participation in the study shall be voluntary and the exercise would not fetch any monetary benefits for them. The study was completed in the month of December, 2016.

RESULT

Data was analyzed using SPSS at Central University of Kerala. The major findings are given below:

Socio-Demographic Profile

Table 1: Socio-demographic variables of the respondents

Serial no	Variable	Category	Frequency (%)
1	Victims Sex	Male	16(53.3)
		Female	14(46.7)
2	Caregiver's Sex	Male	11(37.7)
		Female	19(63.3)
3	Marital status	Married	24(80.0)
		Separated	3(10.0)
		Widow/Widower	3(10.0)
4	Relationship with victim	Father	9(30)
		Mother	18(60)
		Grand parents	1(3.3)
		Others	2(6.7)
5	Religion	Hindu	22(73.3)
		Muslim	8(26.7)
6	Occupation	Unemployed	17(56.7)
		Coolie	12(40.7)
		Public sector	1(3.3)
7	Income	Below ₹ 5,000	27(90)
		₹ 5,000 - ₹ 10,000	2(6.7)
		₹ 10,000 - ₹ 20,000	1(3.3)

An analysis shows that 73.3% of the caregivers were Hindus and 26.7% were Muslims (Table 1). The mean age of caregivers was 46.47 years and the mean years of education are 4.5 years. Also, 60% of the caregivers were mothers, 30% were fathers, and other 10% were grandparents or siblings. While 56.7% of the respondents have no jobs, 40.7% are coolie workers and only 3.3% caregivers were working in public sectors. The monthly income of 90% of the caregiver's was below ₹ 5,000.

Stress among caregivers

Table: 2 Stress experienced by caregivers of endosulfan victims

Variable	Category	Frequency	Percent (%)
Experience of stress	Low Stress Group	10	33.3
	High Stress Group	30	66.7

66.7% of the caregivers had a high level of stress and another 33.3% a lower level of stress.

Social Issues of Caregivers

It was seen that 23.3% of the caregivers did not have any support from other family members, 30% had fairly good support and 20% had good support from the family members. Nearly 1/3rd of the caregivers (30%) couldn't attend any function or programme that happened outside the family, 23% got chances sometimes for the same and only a very small percentage (3.3%) did not have any issue with the same. A majority of the respondents, which is 70% respondents sometimes, felt isolated from the society. It was also seen that 23.3% of the respondent's work was getting affected due to their caregiving role. A majority of the respondents (53.3%) did not have money to treat the patient; they depended on the grants provided by the government to the victims. All were getting the benefit from the government out of the endosulfan scheme, but the amount differed and a half the caregivers (50%) did not have correct information on the eligible amount and schemes. A large number of caregivers (70%) faced difficulties in arranging money for the treatment and 96.7% had not faced any negative response from the officials for availing welfare schemes. It was also seen that 83.3% people did not have any social stigma due to the victim.

DISCUSSION

The study had participation from the Hindu and Muslim community representing the general background of the study community. Lower economic status, poor literacy and more participation from backward community are the true representation of the socio-economic condition of Kasaragod district.

The study found that a majority of the caregivers of endosulfan victims had a high level of stress. Social supports perceived by the caregivers in the current study were not encouraging and this partially perhaps explains high stress in care givers. Then, females were more among the caregivers in this study. Researches suggest that females as caregivers experience greater stress and are more prone to depression (Jones & Peters, 1992; Schumacher, 1993). It is proven that social support can mediate caregiver stress, mitigate depression, enhance life satisfaction, and health. A direct relationship between social support and quality of life of caregivers is well documented (Goode et al., 1998; Nijboer et al., 1999).

The respondents in the study were experiencing severe financial burden. Studies among caregivers with chronic illness have reported similar situations earlier (Lim, 2004). The financial support from the governmental agencies needs to be hiked and compensation settlement should be done at the earliest. Financial burden has impacts on the social support network and limits the ability of the care givers in providing continuity of care to the survivors (Sautter et al., 2014).

Contrary to the earlier findings, the perceived stigma among the caregivers was very less. Presence of similarity affected caregivers, relatives and friends in the neighbourhood and internalization of the message that, "I'm not the sole victim" perhaps could be the reason for the reduced severity of the stigma.

The present study had few shortcomings. It was conducted in a small sample size, hence generalization could be difficult. The interview schedule on social issues was not put on statistical validation process.

CONCLUSION

The study unearthed the stress experienced by the caregivers of endosulfan victims and the social issues encountered by them. The government systems have initiated programs and projects for the endosulfan victims during these years. However the present study reveals that there are still unmet needs, especially among the caregivers. There is a need

for a comprehensive psychosocial care programme for addressing the various issues of the caregivers of endosulfan victims with the active involvement of various stake holders.

REFERENCES

1. Bahrami, M., Etemadifar, S., Shahriari, M., & Farsani, A. K. (2014). Caregiver burden among Iranian heart failure family caregivers: A descriptive, exploratory, qualitative study. Iranian journal of nursing and midwifery research, 19 (1), 56-63.

2. Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.

3. Deccan Herald (2014).India to phase out use of Endosulfan by 2017: Government. Retrieved from URL: https://economictimes.indiatimes.com/industry/indl-goods/svs/chem-/-fertilisers/india-to-phase-out-use-of-endosulfan-by-2017-government/articleshow/39893962.cms

4. Ergh, T.C., Rapport, L.J., Coleman, R.D., & Hanks, R.A. (2002). Predictors of caregiver and family functioning following traumatic brain injury: Social support moderates caregiver distress. Journal of Head Trauma Rehabilitation. 17, 155–174.

5. Goode, K. T., Haley, W. E., Roth, D. L., & Ford, G. R. (1998). Predicting longitudinal changes in caregiver physical and mental health: A stress process model. Health Psychology, 17(2), 190-198.

6. Jones, D.A.S., & Peters, T.J. (1992). Caring for elderly dependents: Effects on the carer's quality of life. Age Ageing. 21, 421–428.

7. Kulkarni, P., Kulkarni, P., Ghooi, R., Bhatwadekar, M., Thatte, N., & Anavkar, V. (2014). Stress among Care Givers: The Impact of Nursing a Relative with Cancer. Indian journal of palliative care, 20(1), 31-9.

8. Lim, J. W., & Zebrack, B. (2004). Caring for family members with chronic physical illness: a critical review of caregiver literature. Health and quality of life outcomes, 2, 50.

9. Nijboer, C., Triemstar, M., Tempelaar, R., Sanderman, R., & Van den bos G.A.M. (1999). Determinants of caregiving experiences and mental health of partners of cancer patients. Cancer, 86, 577–588.

10. Rajendran, S. (2002.). Pesticide Spraying in Kerala. Economic and Political Weekly. Retrieved from https://www.epw.in/journal/2002/23/commentary/pesticide-spraying-kerala.html.

11. Sautter, J. M., Tulsky, J. A., Johnson, K. S., Olsen, M. K., Burton-Chase, A. M., Lindquist, J. H., Zimmerman, S., ... Steinhauser, K. E. (2014). Caregiver experience during advanced chronic illness and last year of life. Journal of the American Geriatrics Society, 62(6), 1082-90.

12. Schumacher, K.L., Dodd, M.J., & Paul, S.M. (1993). The stress process in family caregivers of persons receiving chemotherapy. Research in Nursing & Health.16, 395–404.

13. Tilahun, D., Hanlon, C., Fekadu, A., Tekola, B., Baheretibeb, Y., & Hoekstra, R. A. (2016). Stigma, explanatory models and unmet needs of caregivers of children with developmental disorders in a low-income African country: a cross-sectional facility-based survey. BMC health services research, 16, 152.

14. Winslow, B.W. (1997) Effects of formal supports on stress outcomes in family caregivers of Alzheimer's patients. Research in Nursing & Health, 20, 27–37.