Call for Editorial Board Members

As you are well aware that we are a medical and health sciences publishers; publishing peer-reviewed journals and books since 2004.

We are always looking for dedicated editorial board members for our journals. If you completed your master's degree and must have at least five years experience in teaching and having good publication records in journals and books.

If you are interested to be an editorial board member of the journal; please provide your complete resume and affiliation through e-mail (i.e. info@rfppl.co.in) or visit our website (i.e. www.rfppl.co.in) to register yourself online.

Call for Publication of Conference Papers/Abstracts

We publish pre-conference or post-conference papers and abstracts in our journals, and deliver hard copy and giving online access in a timely fashion to the authors.

For more information, please contact:

For more information, please contact:
A Lal
Publication-in-charge
Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi – 110 091 (India)
Phone: 011-22754205, 79695648
E-mail: info@rfppl.co.in

Free Announcements of your Conferences/Workshops/CMEs

This privilege to all Indian and other countries conferences organizing committee members to publish free announcements of your conferences/ workshops. If you are interested, please send your matter in word formats and images or pictures in JPG/JPEG/Tiff formats through e-mail attachments to sales@rfppl.co.in.

Terms & Conditions to publish free announcements:

1. Only conference organizers are eligible up to one full black and white page, but not applicable for the front, inside front, inside back and back cover, however, these pages are paid.
2. Only five pages in every issue are available for free announcements for different conferences.
3. This announcement will come in the next coming issue and no priority will be given.
4. All legal disputes subject to Delhi jurisdiction only.
5. The executive committee of the Red Flower Publication reserve the right to cancel, revise or modify terms and conditions any time without prior notice.

For more information, please contact:
A Lal
Publication-in-charge
Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi – 110 091 (India)
Phone: 011-22754205, 79695648
E-mail: info@rfppl.co.in

Win Free Institutional Subscription!

Simply fill out this form and return scanned copy through e-mail or by post to us.

Name of the Institution_____
Name of the Principal/Chairman_____
Management (Trust/Society/Govt./Company)_____
Address 1_____
Address 2_____
Address 3_____
City_____
Country_____
PIN Code_____
Mobile_____
Email_____

We are regular subscriber of Red Flower Publication journals.

Year of first subscription_____

List of ordered journals (if you subscriberd more then 5 titles, please attach separate sheet)

Ordered through

Name of the Vendor	Subscription Year	Direct/subs Yr

Name of the journal for which you wish to be free winner

Terms & Conditions to win free institutional subscription

1. Only institutions can participate in this scheme
2. In group institutions only one institution would be winner
3. Only five institutions will be winner for each journal
4. An institution will be winner only for one journal
5. The free subscription will be valid for one year only (i.e. 1 Jan – 31 Dec)
6. This free subscription is not renewable, however, can be renewed with payment
7. Any institution can again participate after five years
8. All legal disputes subject to Delhi jurisdiction only
9. This scheme will be available to participate throughout year, but draw will be held in last week of August every year
10. The executive committee of the Red Flower Publication reserve the right to cancel, revise or modify terms and conditions any time without prior notice.

I confirm and certify that the above information is true and correct to the best of my knowledge and belief.

Place: Signature with Seal
Date:

Revised Rates for 2021 (Institutional) Title of the Journal	Frequency	India(INR) Print Only	India(INR) Online Only	Outside India(USD) Print Only	Outside India(USD) Online Only
Community and Public Health Nursing	3	6000	5500	469	430
Indian Journal of Agriculture Business	2	6000	5500	469	430
Indian Journal of Anatomy	4	9000	8500	703	664
Indian Journal of Ancient Medicine and Yoga	4	8500	8000	664	625
Indian Journal of Anesthesia and Analgesia	6	8000	7500	625	586
Indian Journal of Biology	2	6000	5500	469	430
Indian Journal of Cancer Education and Research	2	9500	9000	742	703
Indian Journal of Communicable Diseases	2	9000	8500	703	664
Indian Journal of Dental Education	4	6000	5500	469	430
Indian Journal of Diabetes and Endocrinology	2	8500	8000	664	625
Indian Journal of Emergency Medicine	4	13000	12500	1016	977
Indian Journal of Forensic Medicine and Pathology	4	16500	16000	1289	1250
Indian Journal of Forensic Odontology	2	6000	5500	469	430
Indian Journal of Genetics and Molecular Research	2	7500	7000	586	547
Indian Journal of Law and Human Behavior	3	6500	6000	508	469
Indian Journal of Legal Medicine	2	9000	8500	703	664
Indian Journal of Library and Information Science	3	10000	9500	781	742
Indian Journal of Maternal-Fetal & Neonatal Medicine	2	10000	9500	781	742
Indian Journal of Medical and Health Sciences	2	7500	7000	586	547
Indian Journal of Obstetrics and Gynecology	4	10000	9500	781	742
Indian Journal of Pathology: Research and Practice	6	12500	12000	977	938
Indian Journal of Plant and Soil	2	7000	6500	547	508
Indian Journal of Preventive Medicine	2	7500	7000	586	547
Indian Journal of Research in Anthropology	2	13000	12500	1016	977
Indian Journal of Surgical Nursing	3	6000	5500	469	430
Indian Journal of Trauma and Emergency Pediatrics	4	10000	9500	781	742
Indian Journal of Waste Management	2	10000	9500	781	742
International Journal of Food, Nutrition & Dietetics	3	6000	5500	469	430
International Journal of Forensic Science	2	10500	10000	820	781
International Journal of Neurology and Neurosurgery	4	11000	10500	859	820
International Journal of Pediatric Nursing	3	6000	5500	469	430
International Journal of Political Science	2	6500	6000	508	469
International Journal of Practical Nursing	3	6000	5500	469	430
International Physiology	3	8000	7500	625	586
Journal of Animal Feed Science and Technology	2	8300	7800	648	609
Journal of Cardiovascular Medicine and Surgery	4	10500	10000	820	781
Journal of Emergency and Trauma Nursing	2	6000	5500	469	430
Journal of Forensic Chemistry and Toxicology	2	10000	9500	781	742
Journal of Global Medical Education and Research	2	6400	5900	500	461
Journal of Global Public Health	2	12500	12000	977	938
Journal of Microbiology and Related Research	2	9000	8500	703	664
Journal of Nurse Midwifery and Maternal Health	3	6000	5500	469	430
Journal of Orthopedic Education	3	6000	5500	469	430
Journal of Pharmaceutical and Medicinal Chemistry	2	17000	16500	1328	1289
Journal of Plastic Surgery and Transplantation	2	26900	26400	1954	575
Journal of Psychiatric Nursing	3	6000	5500	469	430
Journal of Social Welfare and Management	4	8000	7500	625	586
New Indian Journal of Surgery	6	8500	7500	664	625
Ophthalmology and Allied Sciences	3	6500	6000	508	469
Pediatric Education and Research	4	8000	7500	625	586
Physiotherapy and Occupational Therapy Journal	4	9500	9000	742	703
RFP Indian Journal of Medical Psychiatry	2	8500	8000	664	625
RFP Journal of Biochemistry and Biophysics	2	7500	7000	586	547
RFP Journal of Dermatology (Formerly Dermatology International)	2	6000	5500	469	430
RFP Journal of ENT and Allied Sciences (Formerly Otolaryngology International)	2	6000	5500	469	430
RFP Journal of Hospital Administration	2	7500	7000	586	547
Urology, Nephrology and Andrology International	2	8000	7500	625	586
Coming Soon					
RFP Gastroenterology International	2	–	–	–	–
Journal of Food Additives and Contaminants	2	–	–	–	–
Journal of Food Technology and Engineering	2	–	–	–	–
Journal of Radiology	2	–	–	–	–
Medical Drugs and Devices	3	–	–	–	–
RFP Indian Journal of Hospital Infection	2	–	–	–	–
RFP Journal of Gerontology and Geriatric Nursing	2	–	–	–	–

Terms of Supply:

1. Agency discount 12.5%. Issues will be sent directly to the end user, otherwise foreign rates will be charged.
2. All back volumes of all journals are available at current rates.
3. All journals are available free online with print order within the subscription period.
4. All legal disputes subject to Delhi jurisdiction.
5. Cancellations are not accepted orders once processed.
6. Demand draft/cheque should be issued in favour of "**Red Flower Publication Pvt. Ltd.**" payable at **Delhi.**
7. Full pre-payment is required. It can be done through online (http://rfppl.co.in/subscribe.php?mid=7).
8. No claims will be entertained if not reported within 6 months of the publishing date.
9. Orders and payments are to be sent to our office address as given below.
10. Postage & Handling is included in the subscription rates.
11. Subscription period is accepted on calendar year basis (i.e. Jan to Dec). However orders may be placed any time throughout the year.

Order from

Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091 (India)
Mobile: 8130750089, Phone: 91-11-**79695648**, 22754205, 22756995, E-mail: sales@rfppl.co.in, Website: www.rfppl.co.in

RFP Indian Journal of Medical Psychiatry

Corresponding address

Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091(India).
Phone: 011-22756995, 22754205, 79695648, Fax: 91-11-22754205
Mail: info@rfppl.co.in, Website: www.rfppl.co.in

RFP Indian Journal of Medical Psychiatry **(IJMP)** is a Tri-annual print and online journal that provides an international platform for rapid and comprehensive scientific communication on mental health across different cultural backgrounds.

The journal helps to its readers to improve knowledge base for the diagnosis, prognosis and treatment of mental health conditions. IJMP aims to help integrate basic science, clinical research and practical implementation of research findings.

Subscription Information

India
Institutional (1 year) (Print+Online): INR8500

Rest of the World
Insitutional (1 year) (Print+Online): $664
Payment instructions
Online payment link:
http://rfppl.co.in/payment.php?mid=15

Cheque/DD:
Please send the US dollar check from outside India and INR check from India made.
Payable to 'Red Flower Publication Private Limited'. Drawn on Delhi branch

Wire transfer/NEFT/RTGS:
Complete Bank Account No: 604320110000467
Beneficiary Name: Red Flower Publication Pvt. Ltd.
Bank & Branch Name: Bank of India; Mayur Vihar
MICR Code: 110013045
Branch Code: 6043
IFSC Code: BKID0006043 (used for RTGS and NEFT transactions)
Swift Code: BKIDINBBDOS

Send all Orders to: Subscription and Marketing Manager, Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091(India), Phone: 011-79695648, 22754205, 22756995, E-mail: sales@rfppl.co.in, Website: www.rfppl.co.in

RFP Indian Journal of Medical Psychiatry

July–December 2020
Volume 3, Number 2

Contents

Original Articles

Review Article

Original Article

RFP Indian Journal of Medical Psychiatry
Volume 3 Number 2, July–December 2020

To Evaluate the Depression and Anxiety Symptoms in Coronary Artery Disease Patients

Amol Patange[1], Md Munnawar S Hussain[2]

Abstract

Background: Depression, anxiety, and anxiety disorders may play a significant role in heart health and have been implicated in the development and progression of both coronary artery disease and heart failure.

Material and Methods: This is descriptive cross-sectional study design was used to find out the anxiety and depression of patients with CAD attending at Khaja banda Nawaz institute of medical sciences. Semi structured interview schedule for the sociodemographic variables, disease related variables, behaviour related variables, and support system was developed by researcher based on extensive literature review. Hospital Anxiety and Depression Scale (HADS), developed by Zigmond and Snaith and validated by Risal et al. was used to assess anxiety and depression.

Result: In our study, out of 70 respondents, 57.8% were between the ages of 40-60 years. The mean age of the respondents was 52.23±7.83 years. Similarly, 60.7% were male and 80.3% were living with their spouse. Moreover, that two-thirds (66.1%) of the respondents were diagnosed with myocardial infraction followed by angina pectoris (20.2%) and ischemic heart failure (13.7%). The 27.4% of the respondents had anxiety caseness and 19.6% had borderline anxiety. Similarly, 26.2% of the respondents had borderline depression and 23.8% had depression caseness.

Conclusion: In coronary artery disease and depression are cause a significant decrease in quality of life for the patient and impose a significant economic burden on society. Anxiety and depression have great correlation in CAD patients. Furthermore, shows that there was significantly positive correlation between anxiety and depression.

Keywords: Depression; Anxiety; Myocardial infraction; Angina pectoris; Ischemic heart disease.

How to cite this article:
Amol patange, Md Munnawar S Hussain / To Evaluate the Depression and Anxiety Symptoms in Coronary Artery Disease Patients. RFP Indian Journal of Medical Psychiatry. 2020;3(2):59–65.

Introduction

Depression and anxiety disorders are common and persistent-and they have a lasting impact on quality of life, functioning, and cardiac health.[1] In this article, we review the associations between negative psychological states and cardiovascular health, the physiologic and health behavior mechanisms that may mediate these relationships, ways to diagnose depression and anxiety disorders, and safe and effective treatments for these disorders.

Among patients with heart disease, such as coronary artery disease or heart failure, depression and anxiety disorders are extremely common. In these populations, 20% to 40% have elevated depressive symptoms, and 15% to 20% suffer from Major depressive disorder (MDD).[2] Anxiety may be even more common than depression. A recent meta-analysis suggests that over 50% of patients with heart failure have elevated rates of anxiety,

Author's Affiliation: [1]Associate Professor, [2]Assistant Professor, Department of Psychiatry, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi, Karnataka 585104, India.

Corresponding Author: Md Munnawar S Hussain, Assistant Professor, Department of Psychiatry, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi, Karnataka 585104, India.

E-mail: kings_4u21@yahoo.com

and 13% meet criteria for an anxiety disorder.[3] These prevalence rates are significantly higher than those in the general population and highlight the high-risk status of cardiac patients for these disorders.

Depression, anxiety, and anxiety disorders may play a significant role in heart health and have been implicated in the development and progression of both coronary artery disease and heart failure.[4] Depression confers a 2-fold increased risk of mortality and adverse cardiac events after myocardial infarction or heart failure and has been linked to poor outcomes after cardiac surgery.[5] The evidence for depression's links to cardiac health is so strong that the American Heart Association (AHA) labelled depression a risk factor for poor medical outcomes following acute coronary syndrome.[6]

The links between depression, anxiety, and cardiovascular disease are complex and involve psychological, biological, and behavioral mechanisms.[7] Depression, arrhythmias, and coronary artery disease frequently co-occur because they share common behavioral and pathophysiological drivers-unhealthy lifestyle, autonomic dysregulation, hypothalamic-pituitary-adrenal (HPA) axis dysregulation, endothelial dysfunction, and inflammation-that are intricately related to one another.[8]

Physiological mechanisms: Autonomic dysregulation, HPA axis dysregulation, inflammation, and endothelial dysfunction all may mediate the relationship between psychiatric illness and heart health. In depression, anxiety, and cardiovascular disease, an autonomic imbalance with sympathetic predominance is common; these disease states potentiate each other through the autonomic nervous system.[9] Chronic stress can lead to inflammation, as well as alterations in cortisol levels via the HPA axis, which in turn leads to lasting, deleterious changes in the limbic system.[10]

Inflammation also promotes depression and anxiety by reducing monoamine neurotransmitters in the brain, by activating anxiety-related neurocircuitry, and by decreasing antidepressant response; moreover, it has been implicated in the development of cardiovascular plaque formation.[11] Finally, endothelial dysfunction is directly related to inflammation and is associated with depression, anxiety, and cardiovascular disease.[12] Ultimately, it is likely that a combination of these shared physiologic processes and lifestyle choices may help explain the observed relationships between depression, anxiety, and cardiovascular health.

Material and Methods

This is descriptive cross-sectional study design was used to find out the anxiety and depression of patients with CAD attending at Khaja banda Nawaz Institute of Medical Sciences. The nonprobability, purposive sampling technique was used to select the required sample size. Researcher identified the sample from OPD by verbally asking the patients about their age and purpose of visit to OPD. Ten medical files were reviewed to confirm the information given by patient. Semi structured interview schedule for the sociodemographic variables, disease related variables, behaviour related variables, and support system was developed by researcher based on extensive literature review. Hospital Anxiety and Depression Scale (HADS), developed by Zigmond and Snaith in 1983 and validated among Nepalese people by Risal et al. on 2015, was used to assess anxiety and depression. It had 7 items related to anxiety and 7 items related to depression.[13]

Statistical Analysis

The data was edited, coded, and entered in excel sheet and then entered into SPSS 20th version for analysis. Data was analysed using descriptive statistics, i.e., frequency, percentage, mean, and standard deviation to describe the patient's demographic variables, anxiety, and depression. Chi square test was used to determine association between different selected variables with level of anxiety and level of depression. Spearman's correlation coefficient test was used to find out the relationship between anxiety and depression of the patients with CAD.

Results

In our study, table 1 shows that, out of 70 respondents, 57.8% were between the ages of 40-60 years. The mean age of the respondents was 52.23±7.83 years. Similarly, 60.7% were male and 80.3% were living with their spouse.

Table 1: Sociodemographic variables of the respondents. n= 70.

Socio-demographic Variables	Frequency	Percentage
Age Group (in years)		
19-39	14	19.6
40-64	40	57.8
65 above	16	22.6

Mean ± SD=52.23±7.83 Min:18 Max: 80

Sex		
Male	42	60.7
Female	28	39.3
Living with		
Spouse	56	80.4
Single	14	19.6
Type Family		
Nuclear	35	50.6
Joint	35	49.4
Educational Status		
Literate	43	61.9
Illiterate	27	38.1
Employment Status after illness		
Employment	44	63.1
Unemployment	26	36.9
If employment, occupation (n=70)		
Housework	21	30.2
Agriculture	14	20.7
Service	18	25.5
Business	17	23.6

Table 2: Disease related variables of the respondents. n= 70

Variables	Frequency	Percent
Type of CAD		
Angina pectoris	14	20.2
Myocardial Infraction	46	66.1
Ischemic heart failure	10	13.7
Mode of treatment		
Medical	22	30.9
Surgical	48	69.1
Presence of co-morbidities		
Yes	35	50.0
No	35	50.0
Family history of CAD		
Yes	8	11.9
No	62	88.1

In our study, table 2 shows that two-thirds (66.1%) of the respondents were diagnosed with myocardial infraction followed by angina pectoris (20.2%) and ischemic heart failure (13.7%). Regarding mode of treatment, more than two-thirds (69.1%) of the respondents had surgery. Likewise, half of the respondents (50.0%) had other comorbid conditions.

Table 3: Level of anxiety and depression of the respondents. n = 70

Level	Frequency	Percentage
Anxiety		
No anxiety (0-7)	37	53.0
Borderline anxiety (8-10)	14	19.6
Anxiety caseness (11-21)	19	27.4
Depression		
No depression (0-7)	35	50.0
Borderline depression (8-10)	18	26.2
Depression caseness (11-21)	17	23.8
Total	70	100

Table 3 shows that 27.4% of the respondents had anxiety caseness and 19.6% had borderline anxiety. Similarly, 26.2% of the respondents had borderline depression and 23.8% had depression caseness.

Table 4: Association of level of anxiety with different variables.

Variable	Level of Anxiety			p-value
	No Anxiety n (%)	Borderline anxiety n (%)	Anxiety caseness n (%)	
Gender				
Male	23 (62.1)	8 (57.1)	8 (42.1)	<0.001
Female	14 (37.8)	6 (42.8)	11 (57.8)	
Living with				
Spouse	25 (67.5)	9 (64.2)	13 (68.4)	0.024
Single	12 (32.4)	5 (35.7)	6 (31.5)	
Occupation status				
Housework	3 (8.1)	3 (21.4)	11 (57.8)	0.013
Agriculture	4 (10.8)	3 (21.4)	5 (26.3)	
Services	11 (29.7)	6 (42.8)	2 (10.5)	
Business	19 (51.3)	2 (14.2)	1 (5.2)	
Economic Status				
Enough to run family	26 (70.2)	10 (71.4)	12 (63.1)	<0.001
Not Enough to run family	9 (24.3)	4 (28.5)	7 (36.8)	

In table 4 shows that the level of anxiety was significantly associated with sex of the respondents where females had more anxiety cases than males. Moreover, respondents who were living single had more anxiety caseness than respondents who were living with their spouse. Similarly, respondents who were involved in housework had more anxiety caseness than other occupation. The results further demonstrated that respondents whose family income is not sufficient to family had more anxiety caseness than respondents whose family income is not enough to run family.

Table 5: Association of level of depression with different variable.

Variable	Level of depression			p-value
	No Anxiety n (%)	Borderline anxiety n (%)	Anxiety caseness n (%)	
Living with				
Spouse	21 (60.0)	11 (61.1)	6 (35.2)	<0.001
Single	14 (40.)	7 (38.8)	11 (64.7)	
Education Status				
Literate	24 (68.5)	12 (24.0)	5 (29.4)	<0.001
Illiterate	11 (31.4)	6 (66.6)	12 (70.5)	
Level of Education				
Up to secondary	16 (45.7)	10 (55.5)	10 (58.8)	0.013
Above Secondary	19 (54.2)	8 (44.4)	7 (41.1)	
Occupation status				
Housework	9 (25.7)	8 (44.4)	9 (52.9)	0.001
Agriculture	3 (8.5)	5 (27.7)	6 (35.2)	
Services	11 (31.4)	2 (11.1)	1 (5.8)	
Business	12 (34.2)	3 (16.6)	1 (5.8)	
Presence of Co Morbidities				
Yes	13 (37.14)	9 (50)	11 (64.7)	0.023
No	22 (62.8)	9 (50)	6 (35.2)	
Family History of CAD				
Yes	9 (25.7)	8 (44.4)	6 (35.2)	0.501
No	26 (74.2)	10 (55.5)	11 (64.7)	

In table 5 shows that respondents who were living single had more depression caseness than respondents who were living with their spouse. Likewise, level of depression was more prevalent among illiterate respondents having CAD than literate respondents having CAD, which further demonstrate that the higher the education the lower the depression cases. Moreover, respondents who were involved in agriculture had more depression caseness than other occupation.

Table 6: Relationship between anxiety and depression score of the respondents. n= 70.

Variables	Anxiety	Depression
Anxiety	1	–
Depression	0.325	1

Table 6 shows that there was significantly positive correlation between anxiety and depression (0.325).

Discussion

Out of 70 patients, 27.4% of the patients have anxiety caseness & 19.6% have borderline anxiety. This observation is virtually same to the study showed by Meneghetti C et al.,[14] where 48.4% of CAD patients have anxiety. Equally, studies showed by Carvalho et al.,[15] and Rothenbacner et al.,[16] showed 32.5% and 8.3% of anxiety between CAD patients, correspondingly. Anxiety between CAD patients is more in the current study which could be due to joblessness position after sickness, lack of knowledge, lack of awareness concerning forecast of CAD, and incomplete therapy facility in the healthcare setting.

In this study, 23.8% patients have depression caseness and 23.8% and 26.2% had borderline depression, whereas studies showed in Meneghetti

C et al.,[14] and Rothenbacner et al.,[16] showed that 26.4% and 5.9% of CAD patients have depression, correspondingly. Depression in CAD patients is more in this study which could be due to lack of awareness and limited convenience and availability of health services facility along with health insurance.

In this study, sex of the patients was suggestively linked with level of anxiety of the CAD patients where females have more level of anxiety than males. This observation is reinforced by the studies showed in Carvalho et al.,[15] and Shibeshi et al.,[17] which presented the more level of anxiety in female CAD patients. Females are more prone to have anxiety which could be due to their multiple roles, gender discrimination, or other family problems. Living status was alternative significant variable which effect the level of anxiety of CAD patients where patients who were existing alone have higher level of anxiety than the patients living with spouse. This finding is reliable with the study conducted in Chopra et al.,[18] which exposed that patients who were living alone had more anxiety. This could be due to lack of physical, emotional, and economic provision amongst those CAD patients who were living alone.

Moreover, family revenue and profession status were also linked with level of anxiety of CAD patients where patients whose annual family revenue was not adequate to run their family had more anxiety level. However, study showed in Khan A et al.,[19] presented that there was no significant relative of anxiety with socioeconomic and profession status of CAD patients. The discrepancy in observing could be due to difference in sample size and sample characteristics. This study establishes that the patients who had higher level of selfesteem have lower level of anxiety likened to patients who have lower level of self-esteem ($p \leq 0.001$). In contrast to this observation, the study showed in Carvalho et al.,[15] exposed that the patients who have more self-esteem score will have higher level of anxiety. This inconsistency in the observation of the studies could be due to presence of different nature of sample and health service facilities which helps to manage their more selfesteem.

The findings of the study presented that level of anxiety was not related with age and comorbid circumstances of the CAD patients. This observing contradicts with the observing of the study showed in Shibeshi et al.,[17] where age was significantly linked with level of anxiety. Similarly, study showed in India 16 presented that level of anxiety of CAD patients had significant association with comorbid condition. The discrepancy in observing might be due to difference in sample size, study setting, and characteristics of sample. The observing of the study presented that people who were living alone have higher level of depression ($p \leq 0.001$) than the patients living with their spouse. This observing is similar to the study showed in Eng H et al.,[20] where patients living alone have more depression than the patients living with their spouse. This could be due to lack of ultimate care and support of family members which is pivotal to the individual who are diseased. Likewise, patients who had greater level of education had lesser level of depression ($p=0.017$). In contrast to this observing, study conducted in Eng H et al.,[20] revealed the education level to be not linked with depression. This discrepancy in observing might be due to presence of different nature of samples and study setting of the study.

Likewise, occupation was recognised as one of the influencing variable for the level of depression of CAD patients ($p=0.001$) in which patients who were involved in housework had greater level of depression compared to patients involved in others occupations (agriculture, service, and business). In contrast to this observing, the study conducted in Khan A et al.,[18] revealed that occupation status was not linked with level of depression. This could be due to use of various tool or inclusion of different nature of sample population. The observing of the study exposed that the comorbidities were significantly linked with the level of depression of CAD patients and this observing is reliable with the study conducted in Eng H et al.,[20] This could be due to more symptoms related to the linked diseases which interrupt the daily activities of the CAD patients which caused them to feel more depressed. Additionally, physical exercise was significantly linked with the level of depression ($p=0.001$) of the CAD patients where the patients who did regular exercise have low level of depression. This could be due to role of exercise in decrease of stress in the individual and improvement of the overall well-being.

Further, this study exposed that there was significant link among self-esteem and level of depression of the CAD patients where patients with greater level of self-esteem had lesser level of depression. This could be due to association of positive self-esteem with mental well-being, happiness, adjustment, success, achievements, and satisfaction where low self-esteem can donate to negative outcomes such as depression. In contrast to this observing, the observing of study conducted in Carvalho et al.,[15] exposed that the patients who

had higher self-esteem score had greater level of depression. This discrepancy in the observing of the study might be due to inclusion of various group of sample population in the studies. In this study level of depression was not significantly linked with sex of the CAD patients, whereas study conducted in Carvalho et al.,[15] showed that depression had significant association with sex of the patients. The discrepancy in findings could be due to difference in sample population and study setting.

Conclusion

In conclusion, coronary artery disease and depression are both highly prevalent diseases. Both of them cause a significant decrease in quality of life for the patient and impose a significant economic burden on society. Anxiety and depression have great correlation in CAD patients. So, psychiatry visits by specialties along with assessment by nurses in cardiovascular patients are recommended for case finding in anxiety and depression.

Reference

1. Thombs BD, Bass EB, Ford DE, et al. Prevalence of depression in survivors of acute myocardial infarction. J Gen Intern Med. 2006;21:30-38.
2. Rutledge T, Reis VA, Linke SE, et al. Depression in heart failure a meta-analytic review of prevalence, intervention effects, and associations with clinical outcomes. J Am Coll Cardiol. 2006;48:1527-1537.
3. Huffman JC, Celano CM, Beach SR, et al. Depression and cardiac disease: epidemiology, mechanisms, and diagnosis. Cardiovasc Psychiatry Neurol. 2013
4. Easton K, Coventry P, Lovell K, et al. Prevalence and measurement of anxiety in samples of patients with heart failure: meta-analysis. J Cardiovasc Nurs. 2015. Accessed November 1, 2016.
5. Martens EJ, Smith OR, Winter J, et al. Cardiac history, prior depression and personality predict course of depressive symptoms after myocardial infarction. Psychol Med. 2008;38:257-264.
6. Grace SL, Abbey SE, Irvine J, et al. Prospective examination of anxiety persistence and its relationship to cardiac symptoms and recurrent cardiac events. Psychother Psychosom. 2004;73:344-352.
7. Wulsin LR, Singal BM. Do depressive symptoms increase the risk for the onset of coronary disease? A systematic quantitative review. Psychosom Med. 2003;65:201-210.
8. Garfield LD, Scherrer JF, Hauptman PJ, et al. Association of anxiety disorders and depression with incident heart failure. Psychosom Med. 2014;76:128-136.
9. Van Melle JP, de Jonge P, Spijkerman TA, et al. Prognostic association of depression following myocardial infarction with mortality and cardiovascular events: a meta-analysis. Psychosom Med. 2004;66:814-822.
10. Blumenthal JA, Lett HS, Babyak MA, et al. Depression as a risk factor for mortality after coronary artery bypass surgery. Lancet. 2003;362:604-609.
11. Lichtman JH, Froelicher ES, Blumenthal JA, et al. Depression as a risk factor for poor prognosis among patients with acute coronary syndrome: systematic review and recommendations: a scientific statement from the American Heart Association. Circulation. 2014;129:1350-1369.
12. Celano CM, Millstein RA, Bedoya CA, et al. Association between anxiety and mortality in patients with coronary artery disease: a meta-analysis. Am Heart J. 2015;170:1105-1115.
13. Risal A., K. Manandhar, M. Linde, R. Koju, T. J. Steiner, and A. Holen, "Reliability and validity of a Nepali-language version of the hospital anxiety and depression scale (HADS)," Kathmandu University Medical Journal, 2015;13(50):115–124.
14. Meneghetti CC, B. L. Guidolin, P. R. Zimmermann, and A Sfoggia, "Screening for symptoms of anxiety and depression in patients admitted to a university hospital with acute coronary syndrome," Trends in Psychiatry and Psychotherapy, 2017; 39(1):12–18.
15. Carvalho I. G, E. Dos Santos Bertolli, L. Paiva, L. A. Rossi, R. A. S. Dantas, andD. A. Pompeo, "Anxiety, depression, resilience and self-esteem in individuals with cardiovascular diseases," Revista Latino-Americana de Enfermagem, vol. 24, Article ID e2836, 2016.
16. Rothenbacher D, H. Hahmann, B.W¨usten,W. Koenig, and H. Brenner, "Symptoms of anxiety and depression in patients with stable coronary heart disease: Prognostic value and consideration of pathogenetic links," European Journal of Cardiovascular Prevention and Rehabilitation. 2007;14(4):547–554.
17. Shibeshi WA,Y. Young-Xu, andC. M. Blatt, "Anxietyworsens prognosis in patients with coronary artery disease," Journal of the American College of Cardiology, vol. 2007;49(20):2021–2027.
18. 18. Chopra S, A. Sharma, P. P. Verghese, and B. P. Chris, "A descriptive study to assess

the psychiatric morbidity among patients with coronary artery disease," 2011.

19. Khan SA, S. Azhar, S. M. Asad et al., "Assessment of anxiety and depression in hospitalized cardiac patients of Faisalabad institute of cardiology, Pakistan," Tropical Journal of Pharmaceutical Research2016;15(11) 2483–2488.

20. H. S. Eng, L. C. Yean, S. Das et al., "Anxiety and depression in patients with coronary heart disease: A study in a tertiary hospital," Iranian Journal of Medical Sciences., 2011;36(3):201–206.

Indian Journal of Medical Psychiatry

Library Recommendation Form

If you would like to recommend this journal to your library, simply complete the form given below and return it to us. Please type or print the information clearly. We will forward a sample copy to your library, along with this recommendation card.

Please send a sample copy to:

Name of Librarian

Name of Library

Address of Library

Recommended by:

Your Name/ Title

Department

Address

Dear Librarian,

I would like to recommend that your library subscribe to the Indian Journal of Medical Psychiatry. I believe the major future uses of the journal for your library would provide:

1. Useful information for members of my specialty.
2. An excellent research aid.
3. An invaluable student resource.

I have a personal subscription and understand and appreciate the value an institutional subscription would mean to our staff.

Should the journal you're reading right now be a part of your University or institution's library? To have a free sample sent to your librarian, simply fill out and mail this today!

Stock Manager
Red Flower Publication Pvt. Ltd.
48/41-42, DSIDC, Pocket-II
Mayur Vihar Phase-I
Delhi - 110 091(India).
Phone: 011-79695648, 22754205, 22756995, Cell: +91-9821671871
E-mail: sales@rfppl.co.in

Original Article

RFP Indian Journal of Medical Psychiatry
Volume 3 Number 2, July–December 2020

A Case Control Study of Quality of Life in Schizophrenic Patients

Amol Patange[1], Md Munnawar S Hussain[2]

Abstract

Background: Schizophrenia is a severe mental disorder characterized by three broad categories of symptoms: positive symptoms, negative symptoms, and cognitive symptoms. Quality of life (QoL) is defined by the World Health Organization as "Individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns."

Materials and Methods: This is a descriptive epidemiological, non-interventional, study single center, cross sectional, observational study. The study was conducted at Department of Psychiatry, Khaja banda Nawaz Institute of Medical Sciences, Kalaburagi, Karnataka with inpatient units, outpatient clinics, and specialty psychiatric rehabilitation services. Thirty-five consecutive outpatients with schizophrenia attending the hospital fulfilling the inclusion and exclusion criteria were recruited for this study.

Result: The mean duration of illness was 6.32 years for schizophrenics and the duration of treatment was 6.10 years. On comparing the domain raw score, the mean physical and psychological domain raw scores for Schizophrenia were 21.24±5.16 and 17.32±2.97, respectively, while among the controls these were 24.36±2.89 and 21.37±1.95, respectively. The differences between them were statistically significant. In the mean social domain raw score, there was a difference noted with a borderline significance (P = 0.0514) while the mean environment raw score was not significant.

Conclusion: The deleterious effects of schizophrenia on QoL occur significantly. Management should be planned with this consideration to yield better outcomes.

Keywords: Schizophrenia; Quality of life (QoL); Psychiatric Rehabilitation Services.

How to cite this article:
Amol Patange, Md Munnawar S Hussain / A Case Control Study of Quality of Life in Schizophrenic Patients. RFP Indian Journal of Medical Psychiatry. 2020;3(2):67–73

Introduction

Schizophrenia is a serious mental disorder described by three general classes of side effects: positive indications, negative manifestations, and intellectual manifestations. Schizophrenia is related with critical practical impedance, challenges in network living, and weight of inability.[1] Moreover, the indications and weakened job working, schizophrenia influences numerous spheres of living, for example, relational and socio-word related areas.[2]

Quality of life (QoL) is characterized by the WHO as "People's impression of their situation in life with regards to the way of life and worth frameworks wherein they live, and according to their objectives, desires, guidelines, and concerns."[3] Over the most recent years, there has been expanding enthusiasm for personal satisfaction in schizophrenic patients, since schizophrenia is an

Author's Affiliation: [1]Associate Professor, [2]Assistant Professor, Department of Psychiatry, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi, Karnataka 585104, India.

Corresponding Author: Md Munnawar S Hussain, Assistant Professor, Department of Psychiatry, Khaja Bandanawaz Institute of Medical Sciences, Kalaburagi, Karnataka 585104, India.

E-mail: kings_4u21@yahoo.com

extreme, debilitating, long lasting problem, related with serious social and word related dysfunction. Besides, the advancement of atypical antipsychotics with more extensive viability and lower occurrence of extrapyramidal results than typical neuroleptics has advanced more prominent enthusiasm from the patient's viewpoint.[4]

Explaining the connection between mental manifestations and QoL speaks to a significant advance both in clarifying the elements that influence QoL for people with schizophrenia and in understanding the utility of the idea of QoL for directing future treatment improvement endeavors. For instance, if markers of QoL share just a humble sum difference with mental side effects, such discoveries would propose that proportions of QoL have some discriminant legitimacy as well as highlight the significance of looking past manifestation decrease procedures for improving QoL in schizophrenia.[5,6] While these issues have been the focal point of much exploration in the course of recent many years and are of specific significance if proportions of QoL are to be the benchmarks for novel medicines pointed toward improving utilitarian results in schizophrenia, until now, discoveries across contemplates have been blended.

Information on the deciding components of personal satisfaction in individuals with schizophrenia can assist experts with picking the most suitable strategies and more viable mediations. Hence, we trust that this study will add to adjusting intercession procedures at psychosocial rehabilitation services, considering factors that ideal for improving personal satisfaction.

Materials and Methods

This is a descriptive epidemiological, non-interventional, study single center, cross sectional, observational study.

The study was conducted at Department of Psychiatry, Khaja banda Nawaz Institute of Medical Sciences, Kalaburagi, Karnataka with inpatient units, outpatient clinics, and specialty psychiatric rehabilitation services. Psychiatric Rehabilitation Services of the institute is comprised of a multidisciplinary team. For the primary data, the patients and controls were recruited from the psychiatry outpatient wing of a teaching institution. At the start of the study, author (AMA) was educated and calibrated by senior faculties by providing education and training for using the standardized instruments. Repeated checks by faculties ensured its continuous standardized use.

Thirty-five consecutive outpatients with schizophrenia attending the hospital between January 1, 2020 and September 30, 2020 fulfilling the inclusion and exclusion criteria were recruited for this study.

Inclusion criteria for the study were as follows:

1. Patients fulfilling criteria for Schizophrenia as per ICD-10
2. Patients between 18 - 60 years of age;
3. Having received adequate doses of the same antipsychotic drugs for at least 3 months;
4. No history of hospitalization, exacerbation, or electroconvulsive therapy application within the last 3 months;
5. Enough intellectual capacity to answer the scale questions and interact with the interviewer.

Exclusion criteria are the following:

1. History of alcohol and/or drug addiction or abuse;
2. Unwilling patients and those who were not in a position to give voluntary consent;
3. With any other systemic diseases.
4. Those with irregular treatment-seeking behaviour; and
5. Newly diagnosed patients.

Gender, age group, and educational status were matched as far possible with the controls. Apparently normal and healthy controls were drawn from the normal public visiting the hospital. Care was ensured to recruit these controls from willing persons fulfilling the inclusion and exclusion criteria except for inclusion criteria 1 and 3. Those in the control population who had their first- or second-degree relative suffering from any psychiatric disorders were excluded from this study.

From all potential participants, a preformatted, semi structured data collection form for each patient was earlier filled out by a single author (AMA). Details of the sociodemographic information and disease status (for schizophrenics) were collected. The following predictor variables were used. Age was categorized as: i. below the 3rd decade of life, ii. 4th decade of life, iii. 5th decade of life, and iv. 6th decade of life. Education, income, and occupation were classified as per updated Kuppuswamy's socioeconomic scale.[7] Familial setup (joint/nuclear)

and marital status (single/married/separated/divorced) were the other parameters used. Clinical severity of the disease was evaluated using the established norms. For this current study, the following forms were translated to the regional language using the standard, prescribed WHO methodology.[8] The positive and negative syndrome scale (PANSS-positive/PANSS-negative)[9] and general psychopathology scale[10] were used to measure details of the disease in schizophrenic patients.

WHO-QoL-BREF formed the outcome measure tool to collect the QoL of schizophrenic patients. This instrument considers four domains with six items each for physical, psychological, social, and environmental domains and two items from the overall QoL and one in general health.[11] The scale is much similar to Likert with each structural rating done from 1 to 5. Both the raw score and the transformed score of the domains were used. Total score of WHO-BREF was considered as the overall score and used in this study. The higher the score, the better the QoL.

Statistical analysis

Data were collected and analysed using the SPSS 20.0 version. escriptive statistics were provided for the numeric and categorical variables using mean, standard deviation (with prefix ±), and percent distribution (%) as necessary. Group differences were determined using chi-square ($\chi 2$) test for categorical variables and Student's t-test for continuous variables. Cross-tabulation and the chi-square tests were performed. Kruskal–Wallis test was used to determine the overall significant differences among groups. Overall significant differences were analyzed for the presence of pairwise difference using the Mann–Whitney U-test. Wilcoxon signed-rank test was used to assess the distribution of two paired variables in two related samples. P value of less than 0.05 was used for statistical significance.

Result

The sample was composed of patients with schizophrenia (n = 35) and Control (n = 35).

Table 1: Distribution of socio-demographic profile in schizophrenia and control groups.

Variables	Schizophrenia, (n=35) (%)	Controls (n=35) (%)	p-value
Sex			
Male	29	27	0.341
Female	6	8	
Age group			
<20	4	5	0.542
21-40	19	17	
41-60	11	12	
>61	1	1	
Mean Age	37.43 ± 7.42	38.21 ± 8.31	0.843
Religion			
Hindu	26	23	0.635
Muslim	7	11	
Christian	1	-	
Sikh	1	1	
Occupation			
Unemployed	19	14	0.043
Unskilled	12	9	
Skilled	3	7	
Professional	1	5	
Marital status			
Single	13	12	0.493
Married	21	23	
Divorced/Separated	1	0	
Educational status			
Illiterate	1	1	0.734
Primary school	1	2	
Middle school	7	8	
High school	22	18	
Inter	3	4	
Graduate	1	2	
Locality			
Rural	12	9	0.834
Urban	23	26	

In Table 1. Gender wise, there was an equal distribution among the schizophrenics and controls. The mean age of the schizophrenic and control groups were 37.43 ± 7.42 years and 38.21 ± 8.31 years, respectively, and there was no statistically significant difference (P = 0.328). The age group, religion, education, marital status, educational status and locality did not show statistically significantly difference between the case and control groups in table 1.

Table 2: Distribution of duration of illness, and treatment of schizophrenia patients.

Variables	**Schizophrenia,** (Mean±SD)
Duration of illness (years)	6.32±1.46
Duration of treatment (years)	6.10±1.01

The mean duration of illness was 6.32 years for schizophrenics and the duration of treatment was 6.10 years in table 2.

Table 3: Mean Raw Score of the Domains in the study Population.

Parameters	Schizophrenia Mean± SD	Controls Mean± SD	p-value
Physical domain (raw score)	21.24±5.16	24.36±2.89	0.0026
Psychological domain (raw score)	17.32±2.97	21.37±1.95	0.0001
Social domain (raw score)	9.56±1.55	10.13±1.11	0.0514
Environment domain (raw score)	24.83±4.04	25.72±3.82	0.3470

On comparing the domain raw score, the mean physical and psychological domain raw scores for Schizophrenia were 21.24±5.16 and 17.32±2.97, respectively, while among the controls these were 24.36±2.89 and 21.37±1.95, respectively. The differences between them were statistically significant. In the mean social domain raw score, there was a difference noted with a borderline significance (P = 0.0514) while the mean environment raw score was not significant (Table 3).

Table 4: Mean Transformed Score of the Domains and Overall Quality of Life Score in the Study Population.

Parameters	Schizophrenia Mean± SD	Controls Mean± SD	p-value
Physical domain (transformed)	53.86±14.25	65.10±8.72	0.0002
Psychological domain (transformed)	54.24±15.29	60.56±8.18	0.0346
Social domain (transformed)	57.12±17.93	63.83±16.14	0.1014
Environment domain (transformed)	57.13±12.91	61.27±15.12	0.2222
Overall	83.21±11.23	91.47±8.36	0.002

The mean transformed score was statistically different between the physical domain (schizophrenia 53.86±14.25 and controls 65.10±8.72) and psychological domain. Similar to the raw score, a borderline significance was noted between the schizophrenics and normal controls in the social domain. The mean overall WHO-BREF score for schizophrenics was 83.21±11.23 while for controls, it was 91.47±8.36. The difference between them was statistically significant (P = 0.002) (Table 4).

Table 5: The p-value of comparison of Demographic Factors, WHO-BREF (Raw Scores) Domains, and Overall Scores

Parameters	Physical domain	Psychological domain	Social domain	Environment domain	Overall
Age group	0.783	0.083	0.371	0.213	0.217
Gender	0.283	0.932	0.323	0.832	0.317
Religion	0.421	0.435	0.538	0.383	0.893
Education	0.532	0.152	0.323	0.273	0.283
Occupation	0.029	0.053	0.423	0.032	0.037
Income	0.634	0.173	0.653	0.143	0.382
Marital status	0.731	0.721	0.521	0.074	0.643

Table 6: Correlation of the PANSS-Positive, PANSS-Negative Scale, and the General Psychopathology Scales with WHO-BREF Scores in the Schizophrenia Population

Score	WHO QoL- BREF	PANSS-positive		PANSS-negative		General psychopathology	
	Domain	Correlation	p-value	Correlation	p-value	Correlation	p-value
Raw Score	Physical	-0.498	0.002	−0.199	0.251	−0.131	0.453
	Psychological	−0.196	0.259	−0.316	0.064	−0.454	0.006
	Social domain	−0.319	0.061	−0.281	0.102	−0.257	0.136
	Environment domain	−0.231	0.181	−0.153	0.380	−0.234	0.176
Transformed Score	Physical	−0.601	0.000	−0.176	0.311	−0.116	0.506
	Psychological	−0.254	0.140	−0.316	0.064	−0.476	0.003
	Social domain	−0.313	0.067	−0.214	0.217	−0.253	0.142
	Environment domain	−0.213	0.219	−0.187	0.282	−0.211	0.223
Overall		−0.486	0.003	−0.246	0.154	−0.312	0.068

On comparing the demographic factors and domain scores, the age group, gender, religion, education, income, and marital status did not statistically differ among the groups. Table 5 depicts the P value between the domains, overall score, and the groups. Occupation exhibited significant difference in the physical domain, environment domain, and overall score (Table 5).

On correlating the PANNS-positive, -negative, and general psychopathology scales, it was observed that raw score was negatively correlated ($\rho = -0.498$) with the physical domain and general psychopathology was related to the psychological domain raw scores. The transformed score of the psychological domain correlated negatively ($\rho = -0.476$) with a statistical significance. The overall WHO-BREF score was negatively correlated ($\rho = -0.486$, $P = 0.003$) with the PANNS-positive scale (Table 6).

Discussion

This study examined the distinguish in the area of QOL in patients with schizophrenia and healthy, the earlier speaking to a persistent mental disease and the last a constant physical sickness.

The subject of contrasts in assessment of the personal satisfaction among males and females has been broadly discussed about in the literature, although numerous inconsistencies have been watched. Numerous studies have demonstrated that male had a more quality of life than females, particularly in the region of social working.[12] Jarema et al. demonstrated that the personal satisfaction was preferred in males with schizophrenia over in females. [13] In some cases, there was no critical relationship found among gender and the quality of life.[14-19]

Evaluations of unemployment in individuals with schizophrenia were 70-85%,[20] while in our schizophrenic just 29.8% were discovered to be jobless. This can be clarified by the way that in created nations occupations are more convoluted than in less development social orders.[21] It is likewise realized that progress of schizophrenic patients is better in non-industrial nations due to all the more treatment of patients in families and in the public eye and less systematization.[22]

In our study, the mean term of illness was 6.32 years for schizophrenics and the length of therapy was 6.10 years Comparative outcomes can be found in considers embraced by different creators from Poland and abroad. Gorna et al. demonstrated that in individuals with schizophrenia, inside a normal time of 5 years after the primary hospitalization.[23]

In our study, table 3 and table 4 feature that the QoL of schizophrenics is generally improved than that of evidently ordinary solid controls. On QoL scores, schizophrenic patients had most reduced scores in the crude social relationship space. It has been recorded that patients experiencing constant psychological maladjustment have a solid aversion for the related shame attributable to which they reject themselves from ordinary public activity. All things considered, there is a high predominance of formal and casual separations by society/network. This is as per the investigation of Solanki et al.[24] Such underestimated individuals frequently pull back as well as respond by bringing down their social connection and additionally desire as reflected by helpless social scores. Henceforth, the distinction of the mean was most minimal in the social area. Furthermore, the presence of negative indications, for example, sociality, a volition, and detachment were found in patients like Gupta et al.[25]

As seen in table 5, occupation had a critical relationship with the social relationship area of QoL. This shows that occupation may give the social solace to the schizophrenics better than to the ordinary controls. Our examination is steady with Solanki et al., and this can presumably be clarified by the yearning of the patients to live and acquire like "typical individuals" in order to have an ordinary social relationship as clarified before.[25] There was no huge connection between QoL with individual pay too with the social relationship space that was in inconsistency to a past report from India.[26] This was likely because of the distinction in the technique for money assortment. Past examinations gathered the entire family pay, though the current investigation gathered the individual pay of the patients. Additionally, the span of disease and treatment had no relationship with QoL or its area.

PANSS-positive scores were fundamentally corresponded negative way with the physical area and all out QoL table 6, which were like the consequence of Solanki et al.[24] actually, there was no critical relationship in the PANSS-negative scale. The overall psychopathology subscale had a critical negative connection with the mental space in particular. In inconsistency to appropriate writing, just certain areas seem to add to the distinction in the QoL.[27] This could be because of an inalienable contrast in the investigation populace or attributable to the factor that the current populace was under dynamic treatment for fluctuating time spans with countless them having ≥5 long periods

of dynamic treatment, prompting adjustment of indications in singular areas. In any case, the current investigation is in accordance with the investigation of Heslegrave et al.[28] It must be remembered that the size of general psychopathology contains things with questions identified with side effects of despondency and nervousness. It is plausible that nervousness and sadness cloud the other cardinal highlights of schizophrenia. As refered to in the writing this relationship could provide a guidance for future schizophrenic examination.[29]

Social help is viewed as one of the most significant defensive elements of emotional wellness, and is likewise associated with a superior personal satisfaction in individuals with schizophrenia. Numerous examinations affirmed the positive impact of psychoeducation exercises on the personal satisfaction in individuals with mental issues.[30]

Limitations

1. Small sample size might have affected results, for example; difference in psychological health subscale of the WHOQOL may reached statistical significance in a larger sample.
2. The current study was based on an exclusively hospital-based outpatient sample that might not be representative of patients in the community.
3. The current study included patients with DOI of 2 years or more to make the sample homogenous, which limits the generalisation of results to schizophrenic patients having an acute illness.
4. As chronic stable patients were included in this study, data from patients with more severe illness were missing.

Conclusion

There is a relatively poor QoL for schizophrenics as compared to normal individuals in spite of the long term of pharmacological treatment. Chronic schizophrenic patients require more attention in physical and social domains too. Certain factors influencing QoL are not changeable; those that can be changed need to be identified. Effective management of these factors would improve the QoL of these patients. WHO-BREF construct can be used to periodically evaluate the treatment efficiency for targeted interventions and create more specific measures of response to treatment. The study also underlines the need for India-specific QoL BREF questionnaire, given the consideration of our locoregional and cultural aspects.

Reference

1. Habibi R, Nayer MS & Zadeh MK. Educational needs of families of patients with schizophrenia: A literature review. IJMR , 2015: 2(2): 250-255.
2. Chądzyńska M, Charzyńska K. The participation of patients with schizophrenia in psychoeducation – the analyses from the patient's perspective. Archives of Psychiatry and Psychotherapy 2011: 2 : 67–72.
3. Song YY, Kim KR, Park JY, Lee SY, Kang JI, Lee E, Kyoon An S, Kwon JS. Associated Factors of Quality of Life in First-Episode Schizophrenia Patients. Psychiatry Investig, 2011: 8:201-206.
4. Kurtz MM, Tolman A. Neurocognition, Insight into Illness and Subjective Quality-of-Life in Schizophrenia: What is Their Relationship? Schizophr Res.2011: 127(1-3): 157–162.
5. Akinsulore A, Olutayo O. Aloba, B. M. Mapayi, I. O. Oloniniyi, F. O. Fatoye , R. O. A. Makanjuola. Relationship between depressive symptoms and quality of life in Nigerian patients with schizophrenia . Soc Pchiatry Psychiatr Epidemiol. 2014: 49:1191–1198.
6. Kebede D, Alem A, Shibre T, Beyero T. Health related quality of life (SF-36) survey in butajira, rural Ethiopia: Normative data and evaluation of reliability and validity. Ethiopian Medical Journal , 2004: 289-297.
7. Kumar BP, Dudala SR, Rao AR. Kuppuswamy's socio-economic status scale: A revision of economic parameter for 2012. Int J Res Devlop Health 2013;1:2-4.
8. Sartorius N, Kuyken W. Translational of health status instruments. In: Orley J, Kuyken W, editors. Quality of Life Assessment: International Perspectives. 1st ed. Heidelberg, Germany: Springer Verlag; 1994. p. 3-18.
9. Kay SR, Fiszbein A, Opler LA. The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophr Bull 1987;13:261-76.
10. Kay SR. Positive and negative syndromes in schizophrenia. In: Clinical and Experimental Psychiatry Monograph Series of the Department of Psychiatry, Albert Einstein College of Medicine/Montefiore Medical Center Series. Issue 5 of Clinical and experimental psychiatry. Brunner/Mazel, INC, New York: 1991. 33-6.
11. World Health Organization. WHOQOL-BREF: Introduction, administration, scoring and generic version of the assessment, field trial

version. Geneva: World Health Organization; 1996.

12. Pinho LG, Pereira A, Chaves C. Influence of sociodemographic and clinical characteristics on the quality of life of patients with schizophrenia. Journal of Nursing, 2017;51:e03244.
13. Jarema M: Th e study of quality of life as an alternative form of evaluation. New Med 1996;3:15-16.
14. Pasareanu AR, Opsal A, Vederhus JK, Kristensen Q, Clausen T. Quality of life improved following in-patient substance use disorder treatment. Health and Quality of Life Outcomes , 2015: 13:35.
15. Fujino H, Sumiyoshi C, Sumiyoshi T, Yasuda Y, Yamamori H, Ohi K, Fujimoto M, Hashimoto R, Takeda M, Imura O. Predicting employment status and subjective quality of life in patients with schizophrenia. Schizophrenia Research: Cognition , 2016: 3: 20–25.
16. Sabbah I, Sabbah H, Khamis R, Sabbah S, Droubi N. Health related quality of life of university students in Lebanon: Lifestyles behaviors and sociodemographic predictors. Health , 2013;5: 1-12.
17. Boyer L, Millier A, Perthame E, Aballea S, Auquier P, Toumi M. Quality of life is predictive of relapse in schizophrenia. BMC Psychiatry , 2013: 13:15.
18. Ravens-Sieberer U, Karow A, Barthel D & Klasen F. How to assess quality of life in child and adolescent psychiatry. Dialogues in Clinical Neuroscience. 2014: 16(2): 147-158.
19. Makara-Studzińska M, Wołyniak M & Partyka I. The quality of life in patients with schizophrenia in community mental health service – selected factors. Journal of Pre-Clinical and Clinical Research , 2011: 5(1): 31-34.
20. Lamichhane N, Thapa DK, Tamrakar BK. "Quality of life in substance dependence syndrome." Asian Journal of Health Sciences , 2013: 1(1): 42-46.
21. Lamichhane N. "Quality of Life in Substance Dependence Syndrome." Asian Journal of Health Sciences , 2013: 1(1): 43-46.
22. Radhakrishnan R, Menon J, Kanigere M, Ashok M, Shobha V, Galgali RB, et al. Domains and determinants of quality of life in schizophrenia and systemic lupus erythematosus. Indian J Psychol Med 2012;34:49 55.
23. Gorna K, Jaracz K, Rybakowski F, Rybakowski J. Determinants of objective and subjective quality of life in first-time-admission schizophrenic patients in Poland a longituinal study. Qual Life Res 2008;17:237-247.
24. Solanki RK, Singh P, Midha A, Chugh K. Schizophrenia: Impact on quality of life. Indian J Psychiatry 2008;50:181-6.
25. Gupta S, Kulhara P, Verma SK. Quality of life in schizophrenia and dysthymia. Acta Psychiatr Scand 1998;97:290-6.
26. Chopra P, Herrman H, Kennedy G. Comparison of disability and quality of life measures in patients with long term psychotic disorders and patients with multiple sclerosis: An application of the WHO disability assessment schedule II and WHO quality of life BREF. Int J Rehabil Res 2008;31:141 9.
27. Caron J, Lecomte Y, Stip E, Renaud S. Predictors of quality of life in schizophrenia. Commun Ment Health J 2005;41(4):399-417.
28. Heslegrave RJ, Awad AG, Voruganti LN. The influence neurocognitive deficits and symptoms on quality of life in schizophrenia. J Psychiatry Neurosoci 1997;22:235-43.
29. Cruz BF, de Resende CB, Carvalhaes CF, Cardoso CS, Teixeira AL, Keefe RS, et al. Interview-based assessment of cognition is a strong predictor of quality of life in patients with schizophrenia and severe negative symptoms. Revista Brasileira Psiquiatria. 2016;38:216–21.
30. Lim MWZ and Lee J. Determinants of Health-Related Quality of Life in Schizophrenia: Beyond the Medical Model. Front. Psychiatry. 2018; 9:712.

Original Article

RFP Indian Journal of Medical Psychiatry
Volume 3 Number 2, July–December 2020

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Selected Learning Disorders

Ankita Nancy Das

Abstract

Learning disabilities, or learning disorders, are an umbrella term for a wide variety of learning problem. The most common types of learning disabilities involve problems with reading, writing, math, reasoning, listening, and speaking. The Aim and purpose of this study were to describe the roles and responsibilities of special education teachers (sets) and the challenges they encountered as they attempt to educate their students with learning disabilities in elementary schools Method used in the present study is a pre-experimental research design (one group pre-test post design) was used in the study. The pre-test was administered through a structured questionnaire depicted as 0_1 and then the structured teaching given depicted as X. A post-test was conducted using the same structured questionnaire depicted as 0_2. The interventional evaluative the approach was used in this study .this approach was selected because the research study aimed to evaluate the intervention (structured teaching programme) in improving the knowledge of school teachers in selected schools regarding selected learning disorders in children. The findings of the study are discussed as pre-test shows that 61.67% had good knowledge, 3.33% had very good knowledge, 31.67% had an average level of knowledge, 3.33% were poor in their knowledge. Post-test shows that 60% of subjects had very good knowledge 33.33% had a good score, 5% of subjects had an excellent score, 1.67% was average knowledge. So study can be concluded as it can be seen that the structured the teaching programme was effective in enhancing knowledge of primary school teachers of the city.[2]

Keywords: Learning disorder; Knowledge; Structured teaching programme; Children.

How to cite this article:

Ankita Nancy Das / A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Selected Learning Disorders. RFP Indian Journal of Medical Psychiatry. 2020;3(2):75-78.

Introduction

Learning is essential to replenish knowledge. In the light of knowledge explosion, it is assumed that a student gains one Forth knowledge directly from the teacher, another one-fourth through his effort, next one fourth from experiences and the remaining one fourth will remain unfilled not only during the student period but also throughout the life.

In India, around 13 to 14% of all schools children suffer from a learning disorder. Unfortunately, most schools fail to lend a sympathetic ear to their problems as a result; these students are branded as failures. The reported prevalence in India ranges from 1.6%-15%, varying based on age-range, survey method, a tool used, and region of the country.[7-10] A cross-sectional study conducted in Chandigarh (n = 3600, grade 3 and 4 students) reported 3.08% of children with a diagnosis of LD. Another study using informal assessment, conducted in five

Author's Affiliation: Lecturer, Department of Mental Health Nursing, Maharshi Karve Stree Shikshan Samstha Sitabai Nargundkar College of Nursing for Women, Hingna, Nagpur, Maharashtra 441110, India.

Corresponding Author: Ankita Nancy Das, Lecturer, Department of Mental Health Nursing, Maharshi Karve Stree Shikshan Samstha Sitabai Nargundkar College of Nursing for Women, Hingna, Nagpur, Maharashtra 441110, India.

E-mail: nancydas.khushi@gmail.com

schools in Jaipur (n=1156, children 6-13 years of age) reported 12.8% with LD (21.6%, 15.5% and 22.3% of children with dyslexia, dyscalculia and dysgraphia, respectively) 3It is our responsibility to ensure bright future for today children so that tomorrow society will benefit. As a teacher, providing the best help to children with learning difficulties can be challenging, particularly in mainstream education where there are heterogeneous learners. Alongside the guidance you will receive from the government and your school's curriculum, here are some of the best tips towards creating an all-round positive learning experience - both in mainstream and special schools.[4]

Myth vs. Reality about Learning Disabilities

- MYTH: Dyslexia is caused by vision problems.

FACT: Dyslexia is not tied to visual deficiencies. It is actually a neurological condition that affects how the brain receives, processes, and responds to language.

- MYTH: A child has dyslexia if he or she reverses letters in reading and writing.

FACT: "Reversals or inversions of letters are common until second grade," Callaway says. "Beyond that, it doesn't mean the child is dyslexic,"

- MYTH: Students with dyslexia have low intelligence.

FACT: On the contrary, these students typically have average or above-average intelligence. Like other kids with learning disabilities, students with dyslexia have a gap between their potential learning (for instance, measured by a higher IQ score) and their actual achievement (lower than expected).

- MYTH: Students with dyslexia are lazy.

FACT: "What I hear over and over [from students] is that others don't realize it takes them so much longer to do assignments," Berninger says. "In many cases, they're actually more motivated because they have to work so much harder."

"When you have a child who is truly capable, you can mistake their low performance as a lack of effort. But with dyslexia, it's so far from it," O'Rourke says

- MYTH: Students can't overcome dyslexia and won't learn as much as their peers.

FACT: While children with dyslexia won't outgrow the condition, they can make great strides. Busbice says the best instructional programs are "sequential, explicit, research-based, and multisensory." Tryon advocates for the Orton-Gillingham approach, which meets all of the above criteria.[5]

Materials and Methods

The study was conducted in primary school teachers as the samples. In the present study pre –experimental research design (one group pre test post design) was used in the study. Pre test was administered by means of structured questionnaire depicted as 0_1 and then the structured teaching given depicted as X. a post test was conducted using the same structured questionnaire depicted as 0_2. The study design is depicted as under. (Table 1)

Table 1: Pre–Experimental Research Design (One Group Pre Test Post Design).

Pre Test	Intervention	Post Test
DAY 1	DAY 1	DAY 7
0_1	X	0_2

The investigator planned to analyses the data in the following manner.

Data analyses is done by:

1. Descriptive statistics in that mean, standard deviation and percentage for assessing knowledge regarding selected learning disorders in children among teachers
2. Inferential statistics in that paired t test used to assess the effectiveness of structured teaching programme ,unpaired t test and one way ANNOVA is used for association between knowledge and demographic variables

The Major Findings of the Study

Distribution of school teachers according to their demographic characteristics in terms of frequency and percentage.

1. The analysis of the demographic variables of the study samples gives an idea about the general characteristics of the total teachers of the selected schools of the city. The demographic data in relation to age shows that most of them i.e 40% were belonging to 31-40 years, 35% belonging to 41-50 years,21.7% of 20 to 30 years ,3,3% of samples were of 50 years and above respectively
2. Distribution of school teachers according to gender reveals that all of them were female's .i.e 100% samples were females.

3. Distribution of school teachers according to their religion shows that most of the samples were Hindu 77.3%, Christian were in 18.3%,muslims and Buddhist were 3.3%, and others 1.7 in percent.
4. Distribution do school teachers according to their type of the family reveals that 50% from joint family, nuclear was 48.3%, extended were 1.7% respectively.
5. Distribution of school teachers according to their educational status shows that (42)70% were educated upto postgraduate, post graduate were 14 i.e 23.3%, the diploma holders were 4 i.e 6.7 in percent no others education was observed.
6. Distribution of school teachers according to their years of experience shows that 23.3% of them had experience up to 5 years. 30% had 6-10 years,and 26.7% samples had 11-15 years of experience, 20 samples had more than 15 years of experience.
7. Distribution of school teachers according to their residence was at urban 93.3% i.e. 56 samples and at rural was rural was 6.7% i.e. 4 samples respectively.
8. 88.3% of school teachers were aware and 11.4 were unaware about learning disorders.
9. Distribution of school teachers according to their source of information shows that 35.85 had information from their curriculum, 26.42% from mass media, 22.64 from friends and 15.64% from family member, no health worker was the source of information about learning disorders for the samples

Assessment of pre-test knowledge source of school teachers regarding learning disorders in children

The findings showed that 37 (61.67%) had good knowledge, 19 (31.67%) had average knowledge, 2, i.e 3.33% had poor knowledge, and 0% had excellent level.the minimum score in pre-test was 5 and maximum was 21.

Assessment of post-test knowledge scores of school teachers regarding selected learning disorders in children.

The above findings shows that in 3.33% of the teachers in pre-test had poor level of knowledge score, 31.67% in pre-test and 1.67% in post test had average level of knowledge score, 61.67% in pre test and 33.33% in post test had good level of knowledge score, 3.33% in pre test and 60% in post test had very good and 5% of the teachers in post test had excellent level of knowledge score.

Evaluation of effectiveness of structured teaching programme on knowledge regarding selected learning disorders in children among teachers.

The findings shows that the tabulated value for n=60 -1 i.e. 59 degrees of freedom was 2 .00. the calculated value was 11.44 respectively for the knowledge regarding selected learning disorders in children calculated . The calculated 't' value i.e. 11.44 are much higher than the tabulated value at 5% level of significance for overall knowledge score of teachers which is statistically acceptable level of significance.

Association of knowledge score in relation to demographic variables of the samples.

There was significant association of knowledge score with teacher's years of experience.

Discussion

The present study was conducted to assess the effectiveness of structured teaching programme on knowledge regarding selected learning disorders in children among teachers working in selected schools of the city

The findings of the study are discussed as:

Majority 40% subjects were from the age group of 31-40 years. 100% subjects were female, 73.3% were hindus, 26.7 subjects were having experience up to 11-15 years 93.3% reside at urban part of the city, 88.3% subjects were aware about learning disorders in children, 35.85% subjects had source of information from their curriculum. Pre-test shows that 61.67% had good knowledge, 3.33% had very good knowledge, 31.67% had average level of knowledge, 3.33% were poor in their knowledge. Post test shows that 60% subjects had very good knowledge 33.33% had good score, 5% subjects had excellent score, 1.67% was average knowledge It means structured teaching programme was effective in post test ,there was an association with teachers years of experience therefore knowledge score is associated with their demographic variable.

Conclusion

After the detailed analysis ,this study leads to the following conclusion:

The school teachers do not have 100% knowledge regarding selected learning disorders in children. there was a significant increase in the knowledge

of subjects after the administration of structured teaching programme.to find the effectivesness of structured teaching programme student 't' test was applied and t value was calculated ,post test score was significantly higher at 0.05 level than that of pre test score.thus it was concluded that structured planned teaching programme on selected learning disorders in children among teachers was found effective as a teaching strategy.Hence based on the above cited findings ,it was concluded undoubtedly that the written and taught material by the investigator in the form of structured teaching programme helped to improve school teacher's knowledge on selected learning disorders in children.

Reference

1. By Heather Wolpert-Gawron, tween teacher Telling Stories Through Curriculum Design Teacher, Author, Project Based Learning &EdTech Advocate
2. AT: HELPGUIDE.ORG Trusted guide to mental & emotional health, Learning Disabilities and Disorders) available at:https://www.helpguide.org/articles/autism-learning-disabilities/learning-disabilities
3. The State of Learning Disabilities Facts, Trends and Emerging Issues (Third Edition, 2014) available at: https://www.ncld.org
4. Mogasale VV, Patil VD, Patil NM, Mogasale V. Prevalence of specific learning disabilities among primary school children in a South Indian city. Indian J Pediatr.2012;79:342-7. Http://d-scholarship.pitt.edu/10134/1/katsafanasjd2_ETD _Pitt06.pdf
5. scholastic.com/teachers/articles/teaching-content/dyslexia-myths-and-facts/

Review Article

RFP Indian Journal of Medical Psychiatry
Volume 3 Number 2, July–December 2020

Causes of Aggressive Behaviour

Suprakash Chaudhury[1], Swaleha Mujawar[2], Daniel Saldanha[3], Mahesh Thakur[4]

Abstract

Aggression is any behaviour performed with the aim of harming another man or woman who is prompted to keep away from that damage. There are various psychological theories of aggression. The three personality kinds- psychopathy, Machiavellianism, and narcissism are connected with high ranges of aggression, lack of empathy, and decreased emotional responding. The alternative psychological theory is founded on the 'Big five' personality tendencies, Cognitive Labelling and Excitation transfer theory, Cognitive Neoassociation theory. It could additionally be explained by social theories like Frustration-Aggression speculation, The Social learning concept, Social information Processing principle, Script theory, General Aggression model. There are few predictors of aggression which encompass the patterns of infantile attachment, impulsivity and inattention in preschool years, subnormal IQ etc. Genetic Predispositions may additionally play a part in the occurrence of aggression. The genetic markers of aggression include a polymorphism in the monoamine oxidase A promoter gene (MAOA) and a variant inside the 5-HT serotonin transporter gene. Environmental elements encompass provocation, weapons, exposure to violent environments, and social rejection. Substance addictions also are accountable for inflicting aggression. Intoxication with alcohol is associated with murders, attacks, rapes, and intimate partner violence, due to reduced capability of restraining their violent impulses. Different materials like stimulants, amphetamines, and methamphetamines which induce disinhibition and/ or increased physiological arousal may additionally lead to aggression.

Keywords: Aggression; Psychological theories; Social theories; Genetic predispositions; Environmental factors; Substance dependence.

How to cite this article:

Suprakash Chaudhury, Swaleha Mujawar, Daniel Saldanha et al. / Causes of Aggressive Behaviour. RFP Indian Journal of Medical Psychiatry. 2020;3(2):79-.82

Introduction

Aggression can be described as any behaviour performed with the aim of harming some other individual who's inspired to avoid that harm.[1-2] It includes an overt behaviour that entails threat or motion which could cause pain, withdrawal, or loss of sources. Violence may be defined as a physically or psychologically harmful human aggression that entails either the threat or use of pressure.[3] Despite the fact that aggression is a part of human evolutionary adjustment, it is neither the handiest, nor always the satisfactory, method to coping with discord among human beings.

Causes of Aggressive behaviour

Psychological theories: There are various psychological theories of aggression. The normal and common

Author's Affiliation: [1]Professor, [2]Assistant Professor, [3]Professor and HOD, Department of Psychiatry, Dr D Y Patil Medical College, Hospital and Research Centre, Dr D Y Patil Vidyapeeth, Pimpri, Pune, Maharashtra 411018, India. [4]Associate Professor, Department of Social Work, Karve Institute of Social Service, Pune, Maharashtra 411052, India.

Corresponding Author: Suprakash Chaudhury, Professor, Department of Psychiatry, Dr D Y Patil Medical College, Hospital and Research Centre, Dr D Y Patil Vidyapeeth, Pimpri, Pune, Maharashtra 411018, India.

E-mail: suprakashch@gmail.com

occurrence of violent behaviour everywhere in the globe may additionally convince us that people have an inborn predisposition, or even an instinct, for aggression. The renowned philosopher Hobbes, suggested that human beings are naturally evil and only the social order may restrain their violent dispositions. As opposed to this, Jean-Jacques Rousseau proposed that humans are innately mild but exhibit hostile behaviour due to societal affects. Freud, proposed that individuals similarly to a "life instinct" also have a "death instinct," an impulse to exterminate themselves and others.

The three character types- psychopathy, Machiavellianism, and narcissism are connected with high degrees of aggression, loss of empathy, and reduced emotional responding. Psychopaths, especially those with secondary psychopathy, are often reckless, unafraid, and unworried about terrible results to themselves or others. Narcissists reply belligerently once they feel endangered in particular by way of insults, humiliations, or different threats to their inflated ego, or once they worry that their flaws may be uncovered. Machiavellians use belligerence to obtain their goals and feel little or no remorse when harming others. Considering the possibility of harmful effects to themselves, they are much more likely to aggress circuitously so that they may escape responsibility for their moves.

According to the 'Big Five' personality traits theory- humans low in agreeableness and high in neuroticism are more belligerent and violent.[4] Cognitive Labelling and Excitation transfer theory states that if arousing events are separated by way of a quick amount of time then the arousal from the first event will add to arousal of the second one (Cognitive Labelling).[5] This results in a person turning into an indignant stage far more than is probably predicted from a minor provocation (Excitation switch theory). Cognitive Neo-association theory states that unsightly stories produce poor feelings, which are related to mind and behavioural tendencies which might be in turn connected to fight and flight inclinations. If someone has a dominant 'fight' response then most of the conditions are much more likely to bring forth aggression in that individual.[6]

Social Theories

Aggression can also be explained with the aid of social theories. In keeping with the Frustration-Aggression hypothesis, frustration is precipitated whilst an intention is blocked. Belligerent behaviour takes place due to frustration, and the existence of frustration constantly leads to some shape of aggression.[7] The Social learning theory, of Bandura posited that the capability for aggression is biological. However, aggressive behaviour manifests after viewing the same in others.[8] The individual views belligerent behaviour in a model and imitates that behaviour. Imitation is stronger if they connect with or think highly of the model, or if the model is remunerated or succeeds. That is vicarious reinforcement. For social learning to occur, a toddler should shape a mental illustration of the occasion which includes the possible rewards or punishments for behaviour. A child who imitates a belligerent conduct is likely to repeat the same if he is rewarded. Subsequently they develop self assurance in their capacity to perform aggressive acts. If belligerent behaviours are unsuccessful, they'll have a low self-assurance and would not maintain the behaviour. Social Information Processing (SIP) theory is primarily related to "hostile attributional bias" that's the tendency to interpret ambiguous activities as being motivated by aggressive purpose.[9] Script theory explains aggression by way of the use of diverse scripts.[10] Here the "scripts" suggest a selected state of affairs and a manual for the way to behave in them, learnt through direct experience or observed learning. If a person repeatedly responds to struggle via using scripts that encompass behaving belligerently, these scripts may additionally become chronically available to mind. Later, it becomes generalized to other conditions, which will increase the probability of aggression to arise in those conditions. Consistent with the General Aggression model, aggression in someone depends on their characteristics like biology, genes, persona, attitudes, beliefs, behavioural scripts and environmental trigger consisting of a provocation, an aversive occasion, or an aggression-related cue. Those variables have an impact on the indiivdual's present internal state which include cognitions, mood, and physiological arousal.[11]

There are some predictors which may be utilized in clinical practice to become aware of threat of aggression and act as a predictor. The styles of infantile attachment in particular disorganized attachment characterised by means of inconsistent responses to separation stress are predictive of aggression. Impulsivity and inattention in preschool years might also foretell aggression at a later age. Opposition and hyperactivity increases the chance of aggression. Physical aggression peaks inside the infant years after which decreases but the degree to which one individual is aggressive relative to others of identical age is fairly stable throughout

the existence.[12] Large body size, sensation seeking, and lack of fear at the age of three years foretold aggression at the age of 11 years. Impulsive human beings have problem stopping aggressive impulses. Humans can be much less belligerent in the event that they have extra control over their feelings, more self-control, and a stronger capacity to inhibit their impulses.[13] There may be link between low IQ and higher ranges of aggression in children, especially in kids with poor verbal intelligence and/or with low self-control.

Genetic causes

Genetic Predispositions may additionally play a role in development of aggression in people. The two genetic markers of aggression are a polymorphism inside the promoter of the monoamine oxidase A gene (MAOA) and a version in the 5-HT serotonin transporter gene. MAOA gene polymorphism -aggression and antisocial behaviour are most probable in those youngsters who have this genetic trait and suffered adolescence maltreatment.[14] Diverse hormones are linked to aggression. However, the hormone most continually connected with aggression is testosterone. Low ranges of oestrogen and progesterone may be associated with aggression.

Environmental causes

Surroundings additionally performs a pivotal function in aggression. A very commonplace environmental trigger is provocation. It is able to both be direct or oblique like social exclusion, having rumours unfold about them.[15] The other is the availability of weapons. The semantic memory of humans seeing a real or digital weapon are primed with aggression-related cognitions. Such human beings generally tend to behave aggressively. The folks who are exposed to violence have an associative neural community with aggression-related expertise systems. Human beings exposed to violent environments, whether houses, neighbourhoods, or countries, have an extra predisposition to be aggressive.[16] The equal precept applies to exposure to violent media. It results in desensitization to violence in both the short- and long-term.[17] It has been related to adversarial thinking, upsurge in aggressive thoughts and feelings, and decreases in empathy and prosocial behaviour.[18] The reaction to social rejection may be aggression in situations where the person cannot do something about the rejection without inflicting major retaliations.[19]

Substance use

Substance addictions are also associated with increased aggression. Alcohol intoxication is related with murders, assaults, rapes, and intimate partner violence. The is probably due to the fact that alcohol reduces the individual's potential to inhibit aggression.[20] Other materials like stimulants, amphetamines, and methamphetamines which cause disinhibition and/or an boom in physiological arousal may result in aggression.

Conclusion

Despite the fact that aggression is part of human evolutionary variation, it is neither the only, nor the best, method to managing discord among humans. The amygdala controls emotional expression and also aggression. Negative emotions intermixed with excessive arousal triggers aggression. The prefrontal cortex controls aggressive conduct. In both the sexes testosterone stimulates and serotonin decreases aggression. Alcohol and stimulants may additionally cause aggressive behaviour.

References

1. Bushman, B.J., Huesmann, L.R. Aggression. In: Fiske, S.T., Gilbert, D.T., Lindzey, G. (Eds.), Handbook of social psychology, fifth ed., vol. 2. John Wiley & Sons, Hoboken, NJ, 2010. pp. 833–863.
2. Anderson, C.A., Bushman, B.J. Human aggression. Annual Review of Psychology 2002; 53: 27–51
3. Sadock B. Kaplan and Sadock's Comprehensive Textbook of Psychiatry. 10th ed. Wolters Kluwer; 2017. p. 6309-6393.
4. Barlett, C.P., Anderson, C.A. Direct and indirect relations between the Big 5 personality traits and aggressive behavior. Personality and Individual Differences 2012;52: 870–875.
5. Zillmann, D. Hostility and Aggression. Erlbaum, Hillsdale, NJ. 1979
6. Berkowitz, L. Frustration-aggression hypothesis: examination and reformulation. Psychological Bulletin 1989; 106: 59–73.
7. Dollard, J., Doob, L., Miller, N., Mowrer, O., Sears, R. Frustration and Aggression. Yale University Press, New Haven, CT. 1939.
8. Bandura, A. Social learning and personality development. New York: Holt, Rinehart, and Winston.1963.
9. Dodge, K.A. Social cognition and children's

aggressive behaviour. Child Development 1980; 51: 620–635.

10. Huesmann, L.R. Information processing models of behaviour. In: Hirschberg, N., Humphreys, L. (Eds.), Multivariate Applications in the Social Sciences. Erlbaum, Hillsdale, NJ. 1982. pp. 261–288.
11. Allen JJ, Anderson CA, Bushman BJ.2018 The General Aggression Model. CurrOpin Psychol. 2018; 19:75-80.
12. Bushman, B.J., Huesmann, L.R. Aggression. In: Fiske, S.T., Gilbert, D.T., Lindzey, G. (Eds.), Handbook of social psychology, fifth ed., vol. 2. John Wiley & Sons, Hoboken, NJ, 2010. pp. 833–863.
13. Moffitt, T.E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R.J., Harrington, H., Houts, R., Poulton, R., Roberts, B.W., Ross, S., Sears, M.R., Thomson, W.M., Caspi, A. A gradient of childhood self-control predicts health, wealth, and public safety. PNAS 2011;108: 2693–2698.
14. Kim-Cohen, J., Caspi, A., Taylor, A., Williams, B., Newcombe, R., Craig, I.W., Moffitt, T.E. MAOA, maltreatment, and gene-environment interaction predicting children's mental health: new evidence and a meta-analysis. Molecular Psychiatry 2006;11: 903–913.
15. Bettencourt, B.A., Talley, A., Benjamin, A.J., Valentine, J. Personality and aggressive behavior under provoking and neutral conditions: a meta-analytic review. Psychological Bulletin 2006; 132: 751–777.
16. Aguilar, B., Sroufe, L.A., Egeland, B., Carlson, E. Distinguishing the early-onset/ persistent and adolescence-onset antisocial behavior types: from birth to 16 years. Developmental Psychopathology 2000; 12: 109–132.
17. Warburton, W.A., Williams, K.D., Cairns, D.R. When ostracism leads to aggression: the moderating effects of control deprivation. Journal of Experimental Social Psychology 2006; 42: 213–220.
18. Krahé, B., Berkowitz, L., Brockmeyer, J.H., Bushman, B.J., Coyne, S.M., Dill, K.E., Donnerstein, E., Gentile, D.A., Huesmann, L.R., Kirsch, S.J., Möller, I., Warburton, W.A. Report of the media violence commission. Aggressive Behavior 2012;38: 335–341.
19. Warburton, W.A., Williams, K.D., Cairns, D.R. When ostracism leads to aggression: the moderating effects of control deprivation. Journal of Experimental Social Psychology 2006;42: 213–220.
20. Giancola, P.R. Executive functioning: a conceptual framework for alcohol related aggression. Experimental and Clinical Psychopharmacology 2000; 8: 576–597.

Subject Index

Author Index

Guidelines for Authors

Manuscripts must be prepared in accordance with "Uniform requirements for Manuscripts submitted to Biomedical Journal" developed by international committee of medical Journal Editors

Types of Manuscripts and Limits

Original articles: Up to 3000 words excluding references and abstract and up to 10 references.

Review articles: Up to 2500 words excluding references and abstract and up to 10 references.

Case reports: Up to 1000 words excluding references and abstract and up to 10 references.

Online Submission of the Manuscripts

Articles can also be submitted online from http://rfppl.co.in/customer_index.php.

I) First Page File: Prepare the title page, covering letter, acknowledgement, etc. using a word processor program. All information which can reveal your identity should be here. use text/rtf/doc/PDF files. Do not zip the files.

2) Article file: The main text of the article, beginning from Abstract till References (including tables) should be in this file. Do not include any information (such as acknowledgement, your name in page headers, etc.) in this file. Use text/rtf/doc/PDF files. Do not zip the files. Limit the file size to 400 Kb. Do not incorporate images in the file. If file size is large, graphs can be submitted as images separately without incorporating them in the article file to reduce the size of the file.

3) Images: Submit good quality color images. Each image should be less than 100 Kb in size. Size of the image can be reduced by decreasing the actual height and width of the images (keep up to 400 pixels or 3 inches). All image formats (jpeg, tiff, gif, bmp, png, eps etc.) are acceptable; jpeg is most suitable.

Legends: Legends for the figures/images should be included at the end of the article file.

If the manuscript is submitted online, the contributors' form and copyright transfer form has to be submitted in original with the signatures of all the contributors within two weeks from submission. Hard copies of the images (3 sets), for articles submitted online, should be sent to the journal office at the time of submission of a revised manuscript. Editorial office: Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi – 110 091, India, Phone: 91-11-22754205, 45796900, 22756995. E-mail: author@rfppl.co.in. Submission page: http://rfppl.co.in/article_submission_system.php?mid=5.

Preparation of the Manuscript

The text of observational and experimental articles should be divided into sections with the headings: Introduction, Methods, Results, Discussion, References, Tables, Figures, Figure legends, and Acknowledgment. Do not make subheadings in these sections.

Title Page

The title page should carry

1) Type of manuscript (e.g. Original article, Review article, Case Report)

2) The title of the article should be concise and informative;

3) Running title or short title not more than 50 characters;

4) The name by which each contributor is known (Last name, First name and initials of middle name), with his or her highest academic degree(s) and institutional affiliation;

5) The name of the department(s) and institution(s) to which the work should be attributed;

6) The name, address, phone numbers, facsimile numbers and e-mail address of the contributor responsible for correspondence about the manuscript; should be mentoined.

7) The total number of pages, total number of photographs and word counts separately for abstract and for the text (excluding the references and abstract);

8) Source(s) of support in the form of grants, equipment, drugs, or all of these;

9) Acknowledgement, if any; and

l0) If the manuscript was presented as part at a meeting, the organization, place, and exact date on which it was read.

Abstract Page

The second page should carry the full title of the manuscript and an abstract (of no more than 150 words for case reports, brief reports and 250 words for original articles). The abstract should be structured and state the Context (Background), Aims, Settings and Design, Methods and Materials, Statistical analysis used, Results and Conclusions. Below the abstract should provide 3 to 10 keywords.

Introduction

State the background of the study and purpose of the study and summarize the rationale for the study or observation.

Methods

The methods section should include only information that was available at the time the plan or protocol for the study was written such as study approach, design, type of sample, sample size, sampling technique, setting of the study, description of data collection tools and methods; all information obtained during the conduct of the study belongs in the Results section.

Reports of randomized clinical trials should be based on the CONSORT Statement (http:// www. consort-statement. org). When reporting experiments on human subjects, indicate whether the procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional or regional) and with the Helsinki Declaration of 1975, as revised in 2000 (available at http://www.wma. net/e/policy/l 7-c_e.html).

Results

Present your results in logical sequence in the text, tables, and illustrations, giving the main or most important findings first. Do not repeat in the text all the data in the tables or illustrations; emphasize or summarize only important observations. Extra or supplementary materials and technical details can be placed in an appendix where it will be accessible but will not interrupt the flow of the text; alternatively, it can be published only in the electronic version of the journal.

Discussion

Include summary of key findings (primary outcome measures, secondary outcome measures, results as they relate to a prior hypothesis); Strengths and limitations of the study (study question, study design, data collection, analysis and interpretation); Interpretation and implications in the context of the totality of evidence (is there a systematic review to refer to, if not, could one be reasonably done here and now?, What this study adds to the available evidence, effects on patient care and health policy, possible mechanisms)? Controversies raised by this study; and Future research directions (for this particular research collaboration, underlying mechanisms, clinical research). Do not repeat in detail data or other material given in the Introduction or the Results section.

References

List references in alphabetical order. Each listed reference should be cited in text (not in alphabetic order), and each text citation should be listed in the References section. Identify references in text, tables, and legends by Arabic numerals in square bracket (e.g. [10]). Please refer to ICMJE Guidelines (http://www.nlm.nih.gov/bsd/uniform_ requirements.html) for more examples.

Standard journal article

[1] Flink H, Tegelberg Å, Thörn M, Lagerlöf F. Effect of oral iron supplementation on unstimulated salivary flow rate: A randomized, double-blind, placebo-controlled trial. J Oral Pathol Med 2006; 35: 540–7.

[2] Twetman S, Axelsson S, Dahlgren H, Holm AK, Källestål C, Lagerlöf F, et al. Caries-preventive effect of fluoride toothpaste: A systematic review. Acta Odontol Scand 2003; 61: 347–55.

Article in supplement or special issue

[3] Fleischer W, Reimer K. Povidone-iodine antisepsis. State of the art. Dermatology 1997; 195 Suppl 2: 3–9.

Corporate (collective) author

[4] American Academy of Periodontology. Sonic and ultrasonic scalers in periodontics. J Periodontol 2000; 71: 1792–801.

Unpublished article

[5] Garoushi S, Lassila LV, Tezvergil A, Vallittu PK. Static and fatigue compression test for particulate filler composite resin with fiber-reinforced composite substructure. Dent Mater 2006.

Personal author(s)

[6] Hosmer D, Lemeshow S. Applied logistic regression, 2nd edn. New York: Wiley-Interscience; 2000.

Chapter in book

[7] Nauntofte B, Tenovuo J, Lagerlöf F. Secretion and composition of saliva. In: Fejerskov O,

Kidd EAM, editors. Dental caries: The disease and its clinical management. Oxford: Blackwell Munksgaard; 2003. pp 7–27.

No author given

[8] World Health Organization. Oral health surveys - basic methods, 4th edn. Geneva: World Health Organization; 1997.

Reference from electronic media

[9] National Statistics Online—Trends in suicide by method in England and Wales, 1979–2001. www.statistics.gov.uk/downloads/theme_health/HSQ 20.pdf (accessed Jan 24, 2005): 7–18. Only verified references against the original documents should be cited. Authors are responsible for the accuracy and completeness of their references and for correct text citation. The number of reference should be kept limited to 20 in case of major communications and 10 for short communications.

More information about other reference types is available at www.nlm.nih.gov/bsd/uniform_ requirements.html, but observes some minor deviations (no full stop after journal title, no issue or date after volume, etc.).

Tables

Tables should be self-explanatory and should not duplicate textual material.

Tables with more than 10 columns and 25 rows are not acceptable.

Table numbers should be in Arabic numerals, consecutively in the order of their first citation in the text and supply a brief title for each.

Explain in footnotes all non-standard abbreviations that are used in each table.

For footnotes use the following symbols, in this sequence: *, ¶, †, ‡‡,

Illustrations (Figures)

Graphics files are welcome if supplied as Tiff, EPS, or PowerPoint files of minimum 1200x1600 pixel size. The minimum line weight for line art is 0.5 point for optimal printing.

When possible, please place symbol legends below the figure instead of the side.

Original color figures can be printed in color at the editor's and publisher's discretion provided the author agrees to pay.

Type or print out legends (maximum 40 words, excluding the credit line) for illustrations using double spacing, with Arabic numerals corresponding to the illustrations.

Sending a revised manuscript

While submitting a revised manuscript, contributors are requested to include, along with single copy of the final revised manuscript, a photocopy of the revised manuscript with the changes underlined in red and copy of the comments with the point-to-point clarification to each comment. The manuscript number should be written on each of these documents. If the manuscript is submitted online, the contributors' form and copyright transfer form has to be submitted in original with the signatures of all the contributors within two weeks of submission. Hard copies of images should be sent to the office of the journal. There is no need to send printed manuscript for articles submitted online.

Reprints

Journal provides no free printed, reprints, however a author copy is sent to the main author and additional copies are available on payment (ask to the journal office).

Copyrights

The whole of the literary matter in the journal is copyright and cannot be reproduced without the written permission.

Declaration

A declaration should be submitted stating that the manuscript represents valid work and that neither this manuscript nor one with substantially similar content under the present authorship has been published or is being considered for publication elsewhere and the authorship of this article will not be contested by any one whose name(s) is/are not listed here, and that the order of authorship as placed in the manuscript is final and accepted by the co-authors. Declarations should be signed by all the authors in the order in which they are mentioned in the original manuscript. Matters appearing in the Journal are covered by copyright but no objection will be made to their reproduction provided permission is obtained from the Editor prior to publication and due acknowledgment of the source is made.

Approval of Ethics Committee

We need the Ethics committee approval letter from an Institutional ethical committee (IEC) or an institutional review board (IRB) to publish your Research article or author should submit a statement that the study does not require ethics approval along with evidence. The evidence could either be consent from patients is available and there are no ethics issues in the paper or a letter from an IRB stating that the study in question does not require ethics approval.

Abbreviations

Standard abbreviations should be used and be spelt out when first used in the text. Abbreviations should not be used in the title or abstract.

Checklist

- Manuscript Title
- Covering letter: Signed by all contributors
- Previous publication/ presentations mentioned, Source of funding mentioned
- Conflicts of interest disclosed

Authors

- Middle name initials provided.
- Author for correspondence, with e-mail address provided.
- Number of contributors restricted as per the instructions.
- Identity not revealed in paper except title page (e.g. name of the institute in Methods, citing previous study as 'our study')

Presentation and Format

- Double spacing
- Margins 2.5 cm from all four sides
- Title page contains all the desired information. Running title provided (not more than 50 characters)
- Abstract page contains the full title of the manuscript
- Abstract provided: Structured abstract provided for an original article.
- Keywords provided (three or more)
- Introduction of 75-100 words
- Headings in title case (not ALL CAPITALS). References cited in square brackets
- References according to the journal's instructions

Language and grammar

- Uniformly American English
- Abbreviations spelt out in full for the first time. Numerals from 1 to l0 spelt out
- Numerals at the beginning of the sentence spelt out

Tables and figures

- No repetition of data in tables and graphs and in text.
- Actual numbers from which graphs drawn, provided.
- Figures necessary and of good quality (color)
- Table and figure numbers in Arabic letters (not Roman).
- Labels pasted on back of the photographs (no names written)
- Figure legends provided (not more than 40 words)
- Patients' privacy maintained, (if not permission taken)
- Credit note for borrowed figures/tables provided
- Manuscript provided on a CDROM (with double spacing)

Submitting the Manuscript

- Is the journal editor's contact information current?
- Is the cover letter included with the manuscript? Does the letter:

1. Include the author's postal address, e-mail address, telephone number, and fax number for future correspondence?
2. State that the manuscript is original, not previously published, and not under concurrent consideration elsewhere?
3. Inform the journal editor of the existence of any similar published manuscripts written by the author?
4. Mention any supplemental material you are submitting for the online version of your article. Contributors' Form (to be modified as applicable and one signed copy attached with the manuscript)