
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: 91-11-22754205, 45796900

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: 91-11-22754205, 45796900
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:

<i>Revised Rates for 2020 (Institutional)</i>		Frequency	India(INR)	India(INR)	Outside India(USD)	Outside India(USD)
Title of the Journal			Print Only	Online Only	Print Only	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 Food Additives and Contaminants		2	6000	5500	430	391
Journal of Food Technology and Engineering		2	5500	5000	430	391
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	8000	7500	625	575
Journal of Psychiatric Nursing		3	6000	5500	469	430
Journal of Radiology		2	8500	8000	664	625
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 Gastroenterology International		2	6500	6000	508	469
RFP Indian Journal of Hospital Infection		2	13000	12500	1016	977
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 Gerontology and Geriatric Nursing		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

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: 91-11-45796900, 22754205, 22756995, E-mail: sales@rfppl.co.in, Website: www.rfppl.co.in

RFP Indian Journal of Medical Psychiatry

Editor-in-Chief

Hemendra Singh MD (NIMHANS)

MS Ramaiah Medical College and Hospitals, Bangalore

National Editorial Board Member

Mamatha K,

Ramaiah University of Applied Sciences, Bengaluru

Narayan R Mutalik,

S. Nijalingappa Medical College Bagalkot

Rushi,

PGIMER, Dr RML Hospital, New Delhi

Shankar Das,

Tata Institute of Social Sciences, Mumbai

Sanjoy Roy,

University of Delhi, Delhi

Saroj Kothari,

Govt. Maharani Laxmi Bai Girls P.G. College, Indore

Sonali De,

University of Calcutta, Calcutta,

Suprakash Chaudhury,

Rural Medical College, Loni, Maharashtra

V Sudhakar,

The English and Foreign Languages University, Hyderabad

Vismita Paliwal,

NIMS Medical College and Hospital, Jaipur

Managing Editor

A. Lal

Publication Editor

Manoj Kumar Singh

All right reserved. The views and opinions expressed are of the authors and not of the RFP Indian Journal of Medical Psychiatry. The journal does not guarantee directly or indirectly the quality or efficacy of any product or service featured in the advertisement in the journal, which are purely commercial.

Corresponding address

Red Flower Publication Pvt. Ltd., 48/41-42, DSIDC, Pocket-II, Mayur Vihar Phase-I, Delhi - 110 091(India)
Phone: 91-11-22756995, 22754205, 45796900, 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): INR8000

Rest of the World

Institutional (1 year) (Print+Online): \$625

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: 91-11-45796900, 22754205, 22756995, E-mail: sales@rfppl.co.in, Website: www.rfppl.co.in

RFP Indian Journal of Medical Psychiatry

May - December 2019
Volume 2, Number 2-3

Contents

Review Articles

A Study on Clinical Depression	49
Arindam Mandal, Mayukh Pandit	
Diabetes and Depression	53
Hemendra Singh, Prarthana Bhat	
Suicide Disease (TN)	57
Mayukh Pandit	
Quality of Life of Schizophrenia Patients: A Review	61
Poonam Rani Das, Suprakash Chaudhury, Daniel Saldanha	
A Study on Sociopaths	69
Mayukh Pandit, Anil Kumar Agrawal	

Case Report

A Case Study on a Patient of Suicide Disease	73
Arindam Mandal, Mayukh Pandit	
Subject Index	75
Author Index	76
Guidelines for Authors	77

Red Flower Publication (P) Ltd.

Presents its Book Publications for sale

1. Drugs in Anesthesia and Critical Care (2019) <i>By Bhavna Gupta, Lalit Gupta</i>	INR 595/USD46
2. Critical Care Nursing in Emergency Toxicology (2019) <i>By Vivekanshu Verma, Sandhya Shankar Pandey, Atul Bansal</i>	INR 460/USD34
3. Practical Record Book of Forensic Medicine and Toxicology (2019) <i>By Akhilesh K. Pathak</i>	INR 299/USD23
4. Skeletal and Structural Organizations of Human Body (2019) <i>By D. R. Singh</i>	INR 659/USD51
5. Comprehensive Medical Pharmacology (2019) <i>By Ahmad Najmi</i>	INR 599/USD47
6. Practical Emergency Trauma Toxicology Cases Workbook in Simulation Training (2019) <i>by Vivekanshu Verma, Shiv Rattan Kochar & Devendra Richhariya</i>	INR395/USD31
7. MCQs in Minimal Access & Bariatric Surgery (2019) <i>by Anshuman Kaushal & Dhruv Kundra</i>	INR450/USD35
8. Biostatistics Methods for Medical Research (2019) <i>by Sanjeev Sarmukaddam</i>	INR549/USD44
9. MCQs in Medical Physiology (2019) <i>by Bharati Mehta & Bharti Bhandari Rathore</i>	INR300/USD29
10. Synopsis of Anesthesia (2019) <i>by Lalit Gupta & Bhavna Gupta</i>	INR1195/USD95
11. Shipping Economics (2018) <i>by D. Amutha, Ph.D.</i>	INR345/USD27
12. Breast Cancer: Biology, Prevention and Treatment (2015) <i>by Rana P. Singh, Ph.D. & A. Ramesh Rao, Ph.D.</i>	INR395/USD100
13. Child Intelligence (2005) <i>by Rajesh Shukla, MD.</i>	INR150/USD50
14. Pediatric Companion (2001) <i>by Rajesh Shukla, MD.</i>	INR250/USD50

Order from

Red Flower Publication Pvt. Ltd.

48/41-42, DSIDC, Pocket-II

Mayur Vihar Phase-I

Delhi - 110 091(India)

Mobile: 8130750089, Phone: 91-11-45796900, 22754205, 22756995

E-mail: sales@rfppl.co.in

A Study on Clinical Depression

Arindam Mandal¹, Mayukh Pandit²

Abstract

Depression is a common problem nowadays. Almost one in 15 people suffer from such chronic condition. These disease have become a part of life which if untreated could be hazardous at the later stages of life. Suicide ideation is often developed in the patients of chronic depression. My article focuses upon the types, signs and symptoms, proper treatment management and concluding with positive attitude and prevention of this illness as prevention is always better than cure.

Keywords: Suicide ideation; Hazardous

How to cite this article:

Arindam Mandal, Mayukh Pandit. A Study on Clinical Depression. RFP Indian Journal of Medical Psychiatry. 2019;2(2-3):49-51.

Introduction

According to Cambridge dictionary, the word 'depressed' means unhappy and without hope. Depression is a state of feeling very unhappy and anxious without hope for future. Clinical depression also known as major depressive disorder defined by American Psychiatric Association as common and serious medical illness that negatively affects one's feelings and one's thought process.¹ This condition also causes feelings of sadness and loss of interest in activities. According to World Health Organisation, depression is a common illness affecting worldwide with more than 264 million people.² This condition is treatable. There are psycho social treatments which are very effective for mild depression and there are also very effective treatments for moderate to severe depression.

Discussion

In our present era, depression have become so common that it is seen that one in 15 adults are affected with clinical depression. And one in six people will experience depression at some point of time in their life. It is also seen that women suffer depression more than men. Studies have also shown that one third of women would experience major depressive episodes in their lifetime.

National Institute of Mental Health classifies depressive disorder in four forms.³

Dysthymia

This last for at least two years. There they may have episodes of major depressive disorder with symptoms persisting for 2 years.

Author's Affiliation: ¹Oral and Maxillofacial Oncosurgeon, DESUN Hospital, Kolkata, West Bengal 700107, India.

²UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

Correspondence and Reprint Requests: Mayukh Pandit, UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

E-mail: mayukhpandit17@gmail.com

Postpartum depression

This is suffered by women after giving birth as the name suggests. The experience full blown major depression during pregnancy.

Psychotic depression

This occurs when a person has severe depression and there is an existing form of psychosis such as having delusions and hallucinations.

Seasonal affective disorder

This is characterized by onset of depression during winter months, when there is less natural sunlight.

There is also a disorder which is different from depression but it includes episodes of extremely low moods that makes all the criteria for Major depressive disorder this is known as bipolar disorder where a person also experience extreme high moods called 'mania'.

One main find the signs of clinical depression by proper observation and study for at least two weeks. He must observe the under followings.⁴

1. Persistent sadness would be followed by anxiety, apathy and mood swings.
2. There would be lack of concentration followed by slowness in any type of activities.
3. There would be signs of constant irritability followed by restlessness and agitation. In women excessive crying have been observed.
4. The patient would be in some neck for excessive sleepiness.
5. There might be signs of loss of appetite for excessive hunger in patients of clinical depression.
6. There would be loss of interest or pleasure in any activities and would have guilt and remorse feelings always.
7. Suicidal thoughts are the most dangerous signs and symptoms of depressed patients because suicide ideation is usually developed in patients of major depressive order.

Clinical depression may occur due to various circumstances. There are major cause of clinical depression as followed.⁵

1. Any form of abuse which might be in the form of physical sexual or emotional way might increase the chances of clinical depression in later stages of life.
2. Sadness shock and grief from loss of loved

ones may increase the risk of chronic depression.

3. Studies have shown that sometimes depression could be triggered by major medical conditions.
4. Isolation is also a major clinical factor which often leads to depression. This isolation mostly include social isolation.
5. Drugs such as corticosteroids, antivirals have been seen to put their adverse effect as clinical depressions.
6. Sometimes alcohol or drug abuse leads to depression. It is often mistaken that it makes feel better but that is for temporary period, this would ultimately welcome depression.
7. In today's era, social networking could be a major cause of depression in teenagers because of its adverse effect in our central nervous system.

Methods and treatments

Depression falls under the category of treatable in psychiatric disorders. People respond well and get cure after treatment. Before treatment the professional must examine very specifically both physically and mentally.

According to American psychiatric association there are three forms of treatment available which are followed:

Medication

This include antidepressants which are very effective and they have no stimulating adverse effect on patient not experiencing depression. In first one or two weeks they may produce some improvements. Full benefits are usually seen after 3 months generally the professional might recommend the patient continue to take medication for 6 or more month until it improves.

Psychotherapy

Also known as talk therapy: They are used to treat mild to severe form of depression. Cognitive behaviour therapy (CBT) helps the patient to recognise distorted thinking and change behaviour and thought process. This therapy is often used along with antidepressant medication. Significant improvement would be observed by 10 sessions.

Electroconvulsive therapy (ECT): They are most commonly applied for patients with severe condition who generally doesn't show any response

to other treatments. This treatment is done under anaesthesia with electrical stimulation of the brain stop they have been successful after many years of research from 1940 and have lead to improvements.

Conclusion

It is always said that 'Prevention is better than cure'. So to prevent depression one can perform few things. This would include regular exercise which would always create positive vibes and improve our mental health. One must focus on healthy diet and avoid alcohol or drug abuse full-stop sleep is also very important which one should focus on getting a quality sleep.

Depression is a major problem of mental health but with proper diagnosis and treatment, it would be cured completely. These chronic problem nowadays is often leading to suicide ideation. One must remember every problem of our

life is temporary, so instead of thinking about the problem and developing search chronic conditions of depressive episodes, one must analyze and solve the problem instead. Even if someone becomes the prey of this condition, one must visit mental health professional who could help and improve the patient who could lead their rest of their lives in a prosperous and healthy way.

References

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorder (DSM-5). Fifth edition 2013
2. WHO. Archives. 4th December 2019
3. National Institute of Mental Health. What is Depression.
4. Statistics. Apollo Hospital.
5. Joseph Goldberg. WebMD. Archives

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: 91-11-45796900, 22754205, 22756995, Cell: +91-9821671871

E-mail: sales@rfppl.co.in

Diabetes and Depression

Hemendra Singh¹, Prarthana Bhat²

Abstract

Depression is the common psychiatric illness which is co-existing with diabetes. Depression might increase the underline inflammatory markers which are implicated in diabetes. Untreated depression can lead to worsening of diabetes and its complications. Diabetes and depression are a two way street and they need to be treated with holistic approach which include glycemic control, antidepressants and Cognitive behavioural therapy (CBT) to prevent complications. This article highlights the prevalence diabetes and depression, underlying biological mechanism and various existing approaches for effective management of both conditions.

Keywords: Diabetes; Depression; Psychiatric illnesses.

How to cite this article:

Hemendra Singh, Prarthana Bhat. Diabetes and Depression. RFP Indian Journal of Medical Psychiatry. 2019;2(2-3):53-55.

Introduction

Depression is a common psychiatric illness which co-exists among patients with diabetes. As per the World Health Organization, nearly 340 million people are affected with depression globally and 300 million people will suffer from diabetes mellitus by 2025.^{1,2} From self-report questionnaire and diagnostic interview based studies, the correlation between diabetes and depression has been found to be between 25–35% and 9–14% respectively.³ The co-occurrence of depression in diabetes can be attributed to several factors, including the psychological and psychosocial effects of the disease, a likely common genetic susceptibility and common pathophysiological abnormalities involving neuroimmunological and neuroendocrinical pathways, as well as organic microvascular brain abnormalities due to the inflammation in the brain.⁴ Among those suffering,

the prevalence of depression was found to be higher in the lower socioeconomic class, unmarried individuals, and those with poor social support, poor glycemic control and high stressors. The prevalence was also noted to be twice as higher in women than men due to emotional lability. A special insight into the study of depression in the diabetic population of India alone showed that the correlation could be anywhere between 7–84%.⁵

Biology

The correlation between diabetes and depression is a two way street. Depression is associated with significant pathophysiologic changes that may contribute to the increased susceptibility of depressed patients to Type 2 diabetes and/or complications from both Type 1 and Type 2 diabetes. Although the exact mechanisms are poorly understood despite intense research, depression

Author's Affiliation: ¹Assistant Professor ²Intern, Department of Psychiatry, MS Ramaiah Medical College, Mathikere, Bengaluru, Karnataka 560054, India.

Correspondence and Reprint Requests: Hemendra Singh, Assistant Professor, Department of Psychiatry, MS Ramaiah Medical College, Mathikere, Bengaluru, Karnataka 560054, India.

E-mail: hemendradoc2010@gmail.com

is associated with abnormalities in metabolically significant biologic pathways. This results in increased counter-regulatory hormone release and action, alterations in glucose transport function, and increased immune inflammatory activation. Such abnormalities could contribute to insulin resistance and/or pancreatic-islet cell dysfunction thereby leading to diabetes. Once individuals are diagnosed as diabetic, exaggeration of depressive symptoms may be seen due to factors such as inability to adjust to a diabetic diet, increased lapses in filling of oral hypoglycemic medications.⁶ It can also be attributed to functional impairment and increased expenses due to the morbidity of the diseases.^{6,7,8} To summarize, psychological stress leads to the release of counter regulatory hormones such as glucocorticoids, growth hormone, and catecholamines which counteract the action of insulin by raising blood levels of glucose. Depression is associated with sympathoadrenal activation, hypothalamic-pituitary-adrenocortical hyperactivity, and alterations in the activity of the hypothalamic growth hormone axis. A meta-analysis of multiple cross-sectional studies.⁹ Indicated that patients with diabetes and comorbid depression exhibit poorer glycemic control and greater prevalence of multiple diabetes complications (retinopathy, nephropathy, neuropathy, sexual dysfunction, and macrovascular complications).

Diagnosis

In assessing the prevalence of depression, the observation of cognitive symptoms is more useful than vegetative symptoms. These include weight loss, diminished appetite, hypersomnia, psychomotor retardation, and loss of libido. It was also found that diabetics with severe depression experienced more severe symptoms of diabetes than their non-depressed counterparts. The occurrence of diabetic complications such as retinopathy, nephropathy and macrovascular complications were greater in these individuals.

The impact of depression in diabetes

The increased burden of depression in diabetes has been associated with poor self care, reduced compliance to diabetic diet, poor glycemic control, greater chances of diabetic complications, cognitive impairment, and reduced quality of life. The self-care aspects evaluated were diet, medication, exercise, self-monitoring of blood glucose (SMBG), medical

appointments attendance and composite self-care measures. A significant association between depression and diabetic complications has been identified. Quality of life (QoL) is another concern. A systematic review on depression and QoL in patients with diabetes has concluded that QoL (both physical and mental) was significantly impaired in diabetic patients with comorbid depression.¹⁰ Depression and diabetes in combination behave as a double edged sword for increasing rates of mortality due to their impacts of cardiovascular health.

Treatment of depression in diabetes

After establishing several studies that actualize the likely correlation between diabetes and depression, one must choose a drug that not only targets glycemic control, but proves useful for the depression aspect as well.³ In this regard, nortriptyline was found to decrease depression, but had a negative impact on glucose control. On the other hand, fluoxetine tended to decrease depression and improved glucose control as well by reducing hbA1C and obesity. In patients with diabetic neuropathy, Duloxetine, paroxetine, amitriptyline and desipramine have been more effective antidepressants than fluoxetine, although their advantages must be weighed over their potential side effects such as weight gain, hyperglycemia and orthostatic hypotension. The newer generation antidepressants have been a boon as they have significantly less antiadrenergic and anticholinergic effects and lack quinidine-like action and lethality in overdose. Paroxetine, but not fluoxetine may be highly effective in treating painful diabetic neuropathy.¹¹ Indeed, in a double-blind, placebo-controlled trial of non-depressed diabetic patients, paroxetine was more tolerable than imipramine but was somewhat less effective than the TCA in reducing symptoms of peripheral neuropathy.¹² However, it must be remembered that the SSRI's are potential inhibitors of cytochrome p450 and therefore they could alter the effectiveness of oral hypoglycemic such as, the thiazolidinedione pioglitazone, the meglitinides, repaglinide, and nateglinide. Therefore, nefazodone, fluoxetine, and fluvoxamine would be expected to confer a risk of problems with hypoglycemia. Moreover, inhibition of the CYP 2C9 isoenzyme by fluoxetine, fluvoxamine, or sertraline would also potentially interfere with CYP 2C9 metabolism of the sulfonylureas tolbutamide and glimeperide. The atypical antidepressant bupropion has minimal inhibition of CYP enzymes, is effective in the treatment of nicotine dependence, and is associated

with minimal sexual dysfunction. A holistic approach to treating depression is also including psychotherapy along with pharmacological therapy since they may help in glycemic control through neurophysiological mechanisms such as reducing stress related hormones and altering the neuropeptides related to stress, appetite and satiety. *Cognitive behavioral therapy* leads to significant improvement in HbA1c and reduces rates of depressive thoughts. Therefore including CBT along with pharmacotherapy is a well rounded approach in targeting depression in diabetics.

Conclusion

To be a great clinician, we must not only see patients as carriers of disease who need to be treated with drugs. Ignoring the psychological burden of a disease leads to treatments that are half as effective as they would be if we saw patients as human beings and health as involving not just physical aspects, but emotional and mental aspects as well. Diabetes is a major life burden, and it is only normal to experience depression, anxiety and poor self care as a result of it. Therefore, it is important to treat the mental aspects that arise out of it. Understanding that depression by itself can increase the inflammatory markers that are implicated to cause diseases such as diabetes is a reminder of how important it is to treat depression and other psychiatric illness in their budding stages so that they don't lead to morbid diseases such as diabetes in the future. Diabetes and depression are a two way street and a double edged sword and they need to be treated with not just glycemic controls but antidepressants and CBT as well to achieve improvements in hbA1C and prevent complications such as neuropathy, retinopathy and diabetic foot. Effective treatment of depression in patients with Type 1 or Type 2 diabetes may normalize neuroendocrine and immunoinflammatory hyperactivation, facilitate psychobehavioral adherence to diet and exercise, and improve glycemic control.¹³ Understanding this and spreading awareness of this has been the objective behind this article so that it can spread light on treating individuals as human beings and not just carriers of disease.

References

1. World Health Organization. World Health Report. Geneva, Switzerland: World Health Organization; 2001.
2. King H, Aubert RE, Herman WH. Global burden of diabetes, 1995–2025: Prevalence, numerical estimates, and projections. *Diabetes Care* 1998 Sep;21(9):1414–31.
3. Dominique L Musselman, Ephi Betan, Hannah Larsen, and Lawrence S Phillips. Relationship of Depression to Diabetes Types 1 and 2: Epidemiology, Biology, and Treatment. *Biol Psychiatry* 2003;54:317–29.
4. Andreoulakis E, Hyphantis T, Kandylis D, et al. Depression in diabetes mellitus: a comprehensive review. *Hippokratia*. 2012 Jul-Sep;16(3):205–14.
5. Naskar S, Victor R, Nath K. Depression in diabetes mellitus: A comprehensive systematic review of literature from an Indian perspective. *Asian Journal of Psychiatry*. 2017;27:85–100. <http://dx.doi.org/10.1016/j.ajp.2017.02.018>
6. Ciechanowski PS, Katon WJ, Russo JE. Depression and diabetes: Impact of depressive symptoms on adherence, function, and costs. *Arch Intern Med* 2000;1160:3278–85.
7. Katon WJ, Von Korff M, Lin E, et al. Population-based care of depression: Effective disease management strategies to decrease prevalence. *Gen Hosp Psychiatry* 1997;19:169–78.
8. Egede LE, Zheng D, Simpson K: Comorbid depression is associated with increased health care use and expenditure in individuals with diabetes. *Diabetes Care* 2002 Mar;25(3):464–70.
9. De Groot M, Anderson R, Freedland KE, et al. Association of depression and diabetes complications: A meta-analysis. *Psychosom Med*. 2001 Jul-Aug;63(4):619–30.
10. Miranda T Schram, Caroline A Baan, and François Pouwer. Depression and Quality of Life in Patients with Diabetes: A Systematic Review from the European Depression in Diabetes (EDID) Research Consortium. *Curr Diabetes Rev* 2009 May;5(2):112–19.
11. Max MB, Lynch SA, Muir J, et al. Effects of desipramine, amitriptyline, and fluoxetine in diabetic neuropathy. *N Engl J Med*. 1992 May 7;326(19):1250–56.
12. Sindrup SH, Gram LF, Brosen K, et al. The selective serotonin reuptake inhibitor paroxetine is effective in the treatment of diabetic neuropathy symptoms. *Pain*. 1990 Aug;42(2):135–44.
13. Lustman PJ, Griffith LS, Clouse RE, et al. Improvement in depression is associated with improvement in glycemic control. *Diabetes* 1995;44(suppl 1):27A.

Red Flower Publication (P) Ltd.

Presents its Book Publications for sale

1. Drugs in Anesthesia and Critical Care (2019) <i>By Bhavna Gupta, Lalit Gupta</i>	INR 595/USD46
2. Critical Care Nursing in Emergency Toxicology (2019) <i>By Vivekanshu Verma, Sandhya Shankar Pandey, Atul Bansal</i>	INR 460/USD34
3. Practical Record Book of Forensic Medicine and Toxicology (2019) <i>By Akhilesh K. Pathak</i>	INR 299/USD23
4. Skeletal and Structural Organizations of Human Body (2019) <i>By D. R. Singh</i>	INR 659/USD51
5. Comprehensive Medical Pharmacology (2019) <i>By Ahmad Najmi</i>	INR 599/USD47
6. Practical Emergency Trauma Toxicology Cases Workbook in Simulation Training (2019) <i>by Vivekanshu Verma, Shiv Rattan Kochar & Devendra Richhariya</i>	INR395/USD31
7. MCQs in Minimal Access & Bariatric Surgery (2019) <i>by Anshuman Kaushal & Dhruv Kundra</i>	INR450/USD35
8. Biostatistics Methods for Medical Research (2019) <i>by Sanjeev Sarmukaddam</i>	INR549/USD44
9. MCQs in Medical Physiology (2019) <i>by Bharati Mehta & Bharti Bhandari Rathore</i>	INR300/USD29
10. Synopsis of Anesthesia (2019) <i>by Lalit Gupta & Bhavna Gupta</i>	INR1195/USD95
11. Shipping Economics (2018) <i>by D. Amutha, Ph.D.</i>	INR345/USD27
12. Breast Cancer: Biology, Prevention and Treatment (2015) <i>by Rana P. Singh, Ph.D. & A. Ramesh Rao, Ph.D.</i>	INR395/USD100
13. Child Intelligence (2005) <i>by Rajesh Shukla, MD.</i>	INR150/USD50
14. Pediatric Companion (2001) <i>by Rajesh Shukla, MD.</i>	INR250/USD50

Order from

Red Flower Publication Pvt. Ltd.

48/41-42, DSIDC, Pocket-II

Mayur Vihar Phase-I

Delhi - 110 091(India)

Mobile: 8130750089, Phone: 91-11-45796900, 22754205, 22756995

E-mail: sales@rfppl.co.in

Suicide Disease (TN)

Mayukh Pandit

Abstract

Trigeminal neuralgia also called Suicide disease is such a disease which affects lots of lives with its excruciating pain which is felt in the division's of one more branches of trigeminal nerve. These pain is known as worst pain a person can suffer which leads to development of psychiatric disorders and that often leads to suicide. It is believed that more than 50% of sufferers have committed suicide. There are treatment available for these disease for pain relief. The highest pain relief treatment is achieved by a surgical procedure known as MVD which relief pain upto 15 years. But no such treatment plan are there which completely cure such disease. I worked and studied these disease for a long time and I invented and designed an implant and wrote an hypothesis which I believe can cure this incurable Suicide disease. I have added some part of my hypothesis in Author's note at last. I believe people must fight these disease positively and defeat such worst disease with a strong will in themselves.

Keywords: Excruciating pain; Microvascular decompression (MVD); Hypothesis.

How to cite this article:

Mayukh Pandit. Suicide Disease (TN). RFP Indian Journal of Medical Psychiatry. 2019; 2(2-3):57-59.

Introduction

Suicide in simple terms can be defined as taking own life voluntarily with an intention. It have been found that majority of those who commits suicide always had psychiatric diagnosis at the time of death. The simplest way to conceptualize psychiatric disorder is disturbance of CCA, i.e. Cognition, Conation, and Affect. Any disequilibrium between three.⁶ Suicide disorder as the name suggests a disease which leads to suicide that is a condition known as trigeminal neuralgia which is characterized by excruciating pain in

distribution of one or more branches of fifth CN a condition where pain becomes unbearable and patients become prone to develop psychiatric disorder which often leads to commit suicide. These pain is known as the world's worst pain a person can suffer. It is believed that more than 50% of sufferers have committed suicide.

Methodologies

Suicide diseases are treated with medication initially. The medication which are used mostly to

Author's Affiliation: UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

Correspondence and Reprint Requests: **Mayukh Pandit**, UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

E-mail: mayukhpandit17@gmail.com

treat Suicide disease are as followed.⁵

- Carbamazepine (Drug of Choice)
- Baclofen
- Gabapentin
- Oxcarbazepine
- Lamotrigine

The initial treatment usually begins with Carbamazepine which often provide relief of symptoms. But unfortunately the relief provided by Carbamazepine or other drugs which are used for treatment may decrease over time. Side effects such as hyponatremia are seen which may necessitate discontinuation of medication.¹

So patients eventually requires operative procedures for long term pain relief. Surgical procedures which are used for the treatment for TN are of two categories:

1. Major Surgery
2. Minor Surgery

Major Surgery

These surgical procedures is done under GA and they are carried out on the back of skull specifically at the mastoid region.

These are the following procedures:

- Microvascular decompression surgery
- Rhizotomy
- Radiosurgery

Minor Surgery

These surgery is a non invasive surgical procedures, where an instrument is allowed to pass inside the skull under X-Ray to enter ganglion. These is done under short anaesthetics.

The non invasive surgery are as followed:

- Glycerol injection
- Balloon compression
- Radio-frequency thermocoagulation

Out of all surgical procedures MVD has the highest pain relief period of 12-15 years or more. Dr Peter Janetta in 1967 have proposed these surgical procedures and reported and published in 'The New England Journal of Medicine' about his success. The initial success rate was 82% for complete pain relief. But major complications were also reported such as facial paralysis and leakage of spinal fluid.

Discussion

According to International Headache Society, suicide disease is painful unilateral affliction of face characterized by brief electric shock limited to divisions of one or more branches of trigeminal nerve.³ From my perspective in simple terms, Suicide disease or Trigeminal neuralgia is a chronic conditions characterized by sudden attack of pain lasting from few hours to several days which is confined to distribution of one or more divisions of trigeminal nerve.

Trigeminal neuralgia can be classified as:

1. Typical Trigeminal neuralgia (TN1)
2. Atypical Trigeminal neuralgia (TN2)

Etiology

TN is a condition which mainly arises from blood vessels typically Superior Cerebellar artery which compress the trigeminal nerve when it exits the brain stem. These compression cause damage to protective covering present around the myelin sheath. These injury to myelin sheath are known to cause such chronic conditions of suffering. The excruciating pain which becomes intolerable to patients. After suffering such chronic conditions patient starts developing psychiatric disorders which often results in long term depression, anxiety followed by sleep disorders.⁴ At further stages suicide ideation is developed in patients.

Blood vessels compress the Vth C.N



Compression damages the myelin sheath



These injury results in development of Trigeminal neuralgia



Excruciating pain becomes unbearable



Patients starts developing psychiatric disorders



Suffering from such chronic conditions results in followings:-

- Depression
- Anxiety
- Sleep disorders



Suicide ideation is developed in patients

Suicide disease may also arise from results of surgeries such as craniofacial surgery, sinus surgery or even oral surgery.

These disorders have been seen affected more in women than men. In some cases it has been found that even simple exposure to wind have stimulated these disease.

Conclusion

I am adding some glimpse of my hypothesis to the context. I recently worked on these incurable Suicide disease and found an excellent cure to these disease. I believe if my hypothesis works, then a permanent pain relief treatment would be achieved. I have invented and designed a surgical implant which would not only cure TN but also might be a treatment procedures for many neuropathic disease.

I am working on these implant and making it more advanced and biocompatible so that no complications can arise from my hypothesis. I am giving my best to make these surgical procedures cheaper than all other surgeries so that everyone can afford these treatment in any part of the nation across the globe. My work would be an achievement that day when it would create a smile in worst pained condition of the face. Suicide disease would be atlas overcome by a beautiful smile. People would get the courage to fight these disease positively and get a permanent cure for pain relief.

Acknowledgment

1. Dr Sanjay B Nyamati (Honorable Dean)
2. Dr Anil Kumar Agrawal (Reader, Department of anatomy)
3. Dr Arindam Mandal (Oral and Maxillofacial Oncosurgeon, DESUN Hospitals, Kolkata)
4. Dr Vinod K.S Ram (H.O.D, Department of Oral and Maxillofacial Pathology)

References

1. Barker FG, Jannetta PJ, Bissonette DJ, et al. The long-term outcome of microvascular decompression for trigeminal neuralgia. *N Engl J Med.* 1996 Apr 25;334(17):1077-83.
2. Dr JM Zakrewska. *Barts and the London* 2001.
3. ICHS Classification ICHD-3. Definition of TN. International Headache Society 2004.
4. Tung-Han Wu, Li-Yu Hu. Risk of psychiatric diagnosis following TN. *The Journal of Headache and Pain.*
5. Neelima Anil Malik. *Textbook of Oral and Maxillofacial surgery.*
6. Niraj Ahuja. *A short textbook of Psychiatry.* Jaypee Publishers 5th edition.

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: 91-11-45796900, 22754205, 22756995, Cell: +91-9821671871

E-mail: sales@rfppl.co.in

Quality of Life of Schizophrenia Patients: A Review

Poonam Rani Das¹, Suprakash Chaudhury², Daniel Saldanha³

Abstract

The study of quality of life (QOL) of schizophrenia patients has gained prominence in the last two decades, especially after the introduction of the second generation antipsychotic drugs. As a result of improved prognosis QOL is now considered as a significant outcome measure of schizophrenia treatment, yet the determinants of QOL for schizophrenia patients are not well known. Earlier treatment of positive symptoms was given more importance and less attention was given to treating long term impairment and chronic illness. Now the goal of treatment is to give the patient good quality of life. This is of paramount importance in disorders like schizophrenia where a complete cure is achieved in less number of patients while in the majority there are relapses or long term impairment due to illness.

Keywords: Quality of life; Psychiatric disorders; Treatment.

How to cite this article:

Poonam Rani Das, Suprakash Chaudhury, Daniel Saldanha. Quality of Life of Schizophrenia Patients: A Review. RFP Indian Journal of Medical Psychiatry. 2019;2(2-3):61-68.

Introduction

Schizophrenia is a clinical disorder of unpredictable but profoundly disruptive psychopathology that involves positive, negative, and cognitive symptoms. The disorder affects cognition, emotion, perception and other attributes of conduct. The disease runs a chronic course with variable outcome. The effect of the disorder is always serious and long lasting. Since its initial description various aspects of schizophrenia has been a subject of debate; whether it is a disease of organic etiology, a group of separate entities, a syndrome, a reaction to stress,

or an accumulation of maladaptive behaviors. The earliest description of schizophrenia is found in Ayurveda where Charaka described schizophrenia patients as gluttonous, filthy, naked with loss of memory. Krepelin in 1896 used the term dementia precox referring to mental deterioration starting early in life. Bleuler in 1911 coined the term schizophrenia, considering the illness to be a group of disorders rather than a single entity. He described the four primary symptoms-autism, ambivalence, loosening of association and affective flattening as the core of the disorder. Later Schneider identified eleven signs whose presence in the absence of course brain disease was strongly suggestive of a

Author's Affiliation: ¹Senior Resident, Department of Psychiatry, Ranchi Institute of Neuropsychiatry & Allied Sciences, Kanke, Jharkhand 834006, India. ²Professor, ³Professor & Head, Department of Psychiatry, Dr DY Patil Medical College, Hospital and Research Centre, Dr DY Patil University, Pimpri-Chinchwad, Maharashtra 411018, India.

Correspondence and Reprint Requests: Suprakash Chaudhury, Professor, Department of Psychiatry, Dr DY Patil Medical College, Hospital and Research Centre, Dr DY Patil University, Pimpri-Chinchwad, Maharashtra 411018, India.

E-mail: suprakashch@gmail.com

diagnosis of schizophrenia and named them as symptoms of first rank. Till the early part of the previous century the outlook for the disorder was bleak. With the advent of electroconvulsive therapy and antipsychotics the prognosis did improve. However, despite advances in treatment many patients are left with long term impairment.

Quality of Life

Now-a-days evaluation of quality of life (QOL) has developed into a significant measure of treatment outcome and well-being of persons affected by psychiatric disorders including schizophrenia.¹⁻³ Because of its severe and persistent nature, schizophrenia has major consequences for the general health, performance, autonomy, subjective well-being and life satisfaction of those afflicted with it.⁴ Many of these patients have lifelong disability, meager income, substantial family stress and may be disconnected from their significant others. Due to the chronicity of the disorder and partial relief of symptoms with treatment, large numbers of patients live in long stay facilities and fail to reach adult landmarks as getting married, having children, and being gainfully employed. The subjective QOL of chronic schizophrenia patients have been described using the QOL interview. The findings indicated that, compared with normal controls, individuals with schizophrenia had lower ratings for all QOL indices except satisfaction with health. The largest difference in QOL between schizophrenia patients and the normal control subjects were in the areas of occupation, finances and social life.⁵⁻⁶ In addition patients with schizophrenia have significantly lesser QOL compared to patients with other psychiatric diagnoses.⁷ In 120 outpatients with schizophrenia both objective and subjective life conditions indicated an impaired QOL. The greatest number of discontented subjects were in the domains of work and finance. Clinical factors such as psychopathology strongly influenced the patient's life satisfaction, while demographic characteristics had a feeble effects on the patients self-assessed QOL.⁸

Leisse & Kallert assessed social integration and QOL of schizophrenia patients in complementary care using five groups of patients who lived in a variety of psychiatric facilities or at home either with or without family support. The study examined psychopathology, extent of social disability, subjective QOL with an emphasis on social relationships, recreation, general

independence. The five groups differed with respect to socio-demographic variables and the degree of social disabilities. The group differences were particularly evident in the areas of daily social life and leisure activities, highlighting the need for further development of complementary systems of psychiatric care.⁹ Priebe et al. evaluated 86 first episode schizophrenia patients and 51 patients with long-term schizophrenia for objective and subjective QOL. Results were compared with samples of inpatients and outpatients with long term schizophrenia. It was found that subjective QOL was lower in the first episode schizophrenia patients compared to those with long term illness and it changed little with time.¹⁰

In terms of demographic variables, marital status and gender are believed to be unrelated to subjective QOL.¹¹⁻¹³ However, Shtasel and colleagues reporting on unmedicated schizophrenia subjects, found that females had higher QOL than males.¹⁴ Further, married patients had higher global satisfaction.⁵ Studies on the relationship of age with subjective life quality has given contradictory results, including negative correlations¹¹⁻¹³ as well as no correlation.⁵

An Indian study reported that on the WHOQOL - BREF scale subjects with Schizophrenia obtained the least scores on social relationship domain, which was significantly negatively correlated with occupation. Patients who were employed patients obtained better scores on this domain of WHOQOL-BREF. Total monthly income was significantly positively correlated with scores on the social relationship domain and total scores of WHOQOL-BREF. On PANSS scores on positive subscale and total scores were significantly negatively correlated with physical, psychological, social relationship domains and total QOL. Negative subscale PANSS had significant negative correlation with physical and psychological domains and total QOL. General psychopathology subscale of PANSS had significant negative correlation with all subscales of QOL.¹⁵

In 30 community living schizophrenia patients on medication and equal number of age and sex matched normal controls assessed with WHOQOL and stigma and discrimination scale it was found that 46% of schizophrenia patients faced high stigma and had significantly lower QOL scores. QOL scores were correlated with poor physical conditions, psychological state, environmental factors as well as lack of social support but not with stigma.¹⁶

Subjective and Objective QOL in Schizophrenia

In schizophrenia subjects psychopathology, as determined by total Brief Psychiatric Rating Scale (BPRS) score, correlated negatively with global life satisfaction and subjective QOL subscales, but not with objective ones. Analysis revealed that subjective measures of QOL were more affected by negative.¹⁷

In outpatients with schizophrenia there was an inverse relation between patients subjective QOL and their score on the PANSS and the number of psychiatric outpatients visits.¹⁸ A study of 90 first admitted schizophrenia patients found that QOL in schizophrenia is affected by illness as a result of the complex interaction between psychopathology and gender related variables.¹⁹ In 80 individuals with schizophrenia scores on subjective and objective QOL measures were found to be markedly different. It was observed that patients of schizophrenia with symptoms of depression assessed their QOL lower and obtained lower scores on subjective QOL. On the other hand those with poor insight assessed their QOL higher. Future research should take this factor into consideration.²⁰

QOL and psychopathology in schizophrenia

Studies evaluating QOL of subjects with schizophrenia have recognized some important influential factors, including social support,²¹ unmet need²² and side effects of drugs.²³ The consensus is that QOL in schizophrenia is significantly negatively impacted by negative symptoms and general psychopathology (e.g., anxiety, depression). On the other hand mixed findings have been reported as far as positive symptoms are concerned.²⁴ There are substantial variations in the size of the associations among negative symptoms, general psychopathology, and QOL. While few studies have reported large relationships among these measures,^{25,26} other studies observed only moderate to small associations.^{27,28}

Meltzer and associates reported a link between negative symptoms and QOL, but they also demonstrated a correlation with positive symptoms.¹¹ However, severe negative symptoms, the presence of tardive dyskinesia, and long duration of illness are all associated with lower QOL.¹² In 70 patients of schizophrenia with mean age 58 years, HRQOL was affected by symptoms of psychosis, psychosocial factors and social maladjustment.²⁹ Another study found that the severity of negative symptom was not related to

poorer QOL but significantly positively correlated with later work-related difficulties, financial dependence, impaired social relationships, inability to enjoy recreational activities and impaired global assessment of functioning.³⁰

In 128 schizophrenia patients QOL scores were associated with positive and negative symptoms and the level of functioning. QOL in schizophrenia was more highly related to negative rather than positive symptoms.²⁶ In a study to examine the differential relations among psychiatric symptoms and the QOL of inpatients and outpatients with schizophrenia, it was found that negative symptoms and general psychopathology had a markedly stronger relationship with the health-related QOL of elderly outpatients with schizophrenia.³¹ Lehman in his study found that low scores on QOL were associated with high ratings on depression and, to a lesser degree, anxiety.^{32,33} Patients with depression and anxiety are likely to observe lives in more negatively than real circumstances, resulting in distortion in appraisal of subjective QOL. Several authors reported negative correlation between depression and QOL. These studies however were mostly about subjective QOL. Reine et al. reported a strong association between QOL in schizophrenia patients in a stabilized phase of the disease and depression. QOL was influenced more by depression rather than symptoms of psychosis. Also, in view of the weak correlation between subjective and objective assessment of QOL, the authors recommended simultaneous evaluation of QOL from subjective and objective perspective.³⁴

In a cross-sectional study of 80 patients with schizophrenia having duration of illness over 1 year and discharged from a hospital at least 6 weeks earlier were assessed with the PANSS, the St. Hans Rating Scale for Extrapyramidal Syndromes, the UKU Side Effect Rating Scale, the Drug Attitude Inventory, and the Lancashire QOL Profile. The results showed that more than half of all patients were satisfied with their life in general. Subjective dissatisfaction was mainly concerned with mental health and partnership. Higher QOL was associated with cognitive symptoms and employment status, while the depression and anxiety component of the PANSS, parkinsonism, and a negative attitude toward antipsychotic medication negatively influenced the QOL.³⁵ Gorna et al. evaluated 46 male and 26 female patients of schizophrenia using the WHOQOL-BREF, Social Functioning Scale (SFS) and Calgary Depression Scale for Schizophrenia (CDS) to assess depressive symptoms and its influence on subjective and

objective QOL showed moderate correlation with objective and strong correlation with subjective measures of QOL. The authors concluded that both subjective and objective QOL in schizophrenia is influenced by clinical symptoms of schizophrenia and depression.³⁶ Positive symptoms and depression were the main clinical factors affecting HRQOL in 157 stable outpatients with schizophrenia.³⁷

In schizophrenia patients a number of studies have found strong relationships among general psychopathology, negative symptoms, and QOL in the early course of the illness.^{10,38,39} Impaired cognitive function identified by interview-based assessment in 79 schizophrenia outpatients with severe negative symptoms, were a strong predictor of QOL.⁴⁰

Suttajit and Pilakantain evaluated 80 individuals with schizophrenia and found that negative symptoms, low mood, and poor contact with loved ones were the most important predictors of poor QOL. However, positive symptoms, disorganized thought, anxiety/depression, decreased social support and adverse life events were also correlated with QOL.⁴¹

Although no studies have compared the relations between psychiatric symptoms and QOL for individuals with chronic versus first-episode psychosis, it seems plausible that the recent onset of such a debilitating illness may enhance the impact of the symptoms of this illness on QOL. Unfortunately, studies have yet to examine how the relationship between psychiatric symptoms and QOL changes throughout the course of schizophrenia and fully elucidate whether such symptoms pose increased threats to the QOL of individuals living in the community.

Insight and QOL

In 17 schizophrenia patients discharged from the hospital and recovering from a relapse, QOL was associated with positive symptoms and misattribution on the Scale for Assessment of Unawareness of Mental Disorder (SUMD). No significant correlations were noted between neuropsychological deficits and QOL.⁴²

Doyle et al. assessed the manner in which insight influenced schizophrenia patients. He evaluated objective life conditions and the concurrent validity between patients' and clinicians' assessments of patients' global QOL in 40 patients. It was found that in patients with good insight there was a

significant correlation between objective and subjective indicators of QOL and also between subjective and external evaluations of global QOL. It was concluded that in schizophrenia subjects with impaired insight the self-report methodology for assessing QOL may not be useful.⁴³ Ilanit et al. reported that improved insight into having a psychotic disorder was related to reduced emotional well-being, lower vocational status, and less economic satisfaction. Insight into the necessity for, taking treatment was positively correlated with higher emotional well-being. Insight had no relation to the symptoms of psychosis.⁴⁴ Another study revealed that remitted individuals with bipolar disorder (BD) and schizophrenia had equally low levels of QOL in all four domains and both subjects with BD and schizophrenia had lower QOL than those in the control group. In individuals with either disorder, insight was negatively associated with QOL on the physical domain, and adverse effects of medication were negatively associated with QOL on the physical and environment domains.⁴⁵

The lack of insight and its influence on subjective QOL and functional capacity was examined by Ashley et al. Results showed that insight interacts with negative symptom severity to predict subjective QOL, while severity of negative symptoms and insight contributed directly to functional capacity. It was concluded that individuals with intact insight are better able to manage their symptoms resulting in improved QOL.⁴⁶ A recent review concluded that good clinical and cognitive insight is associated with depression and poorer self-reported QOL.⁴⁷

Neural substrates of QOL

Patients of Schizophrenia who obtained low scores on QOL were found to have lower Grey Matter (GM) Magnetization transfer ratio (MTR) values in the bilateral temporal pole (BA38), the secondary visual cortex (BA18), bilateral insula, vermis and the cerebellum as compared to patients of Schizophrenia with unimpaired QoL.

Significant correlations between MTR values and QoL scores ($p < 0.005$) were observed in the GM of patients in the right temporal pole (BA38), the bilateral insula, the vermis and the right cerebellum. Microstructural changes in areas forming a part functional networks involved in emotional and social interactions processes is related to low QOL in schizophrenia subjects.⁴⁸

QOL and Antipsychotic Medication

Antipsychotic medication is the mainstay of treatment of schizophrenia. The pharmacotherapy of schizophrenia has undergone substantial changes. Research over the past decade has shown that about 80% of patients with schizophrenia respond to drugs, of these 20% recover well after the first attack but 60% and the 20% who do not respond require psychosocial intervention. The discovery of chlorpromazine in early 1950s may be the most revolutionary contribution in the treatment of schizophrenia. Later on other typical antipsychotics were used but these had annoying and debilitating side effects. After the discovery of newer or atypical antipsychotics patients felt more comfortable on medications because these had fewer side effects. These second generation antipsychotics have now become the dominant agents for treating schizophrenia. These agents are related with improved outcome and good psychosocial treatment and rehabilitation. Variety of factors influences the outcome of QOL of patients on antipsychotics. These are side effects, daily dosing, and treatment time, tolerability of medications, impact on cognitive functions, negative and depressive symptoms, compliance, previous experience with medications and social functioning.⁴⁹ Michael et al. in 161 stable schizophrenia patients being treated with first or second generation antipsychotics found that both group of subjects had comparable QOL ratings. However, the presence of adverse effects of antipsychotics was associated with reduced ratings in QOL domains of subjective feelings and general activities.⁵⁰ In 309 patients randomized to receive olanzapine and haloperidol, the comparison did not show any advantage of olanzapine over haloperidol in terms of treatment adherence, symptoms, EPS and QOL. Benefits in terms of reduction in akathesia and improved cognition were weighed against higher costs and weight gain with olanzapine.⁵¹ Inwon et al. examined an association between the type of antipsychotic drugs administered and the QOL of patients with schizophrenia attending rehabilitation programs in community settings. It was found that QOL of patients on atypical antipsychotics was higher in comparison to patients on conventional antipsychotics even when results were adjusted for age, sex and other socio-demographic variables.⁵²

Study by Lieberman et al. with schizophrenia patients receiving olanzapine, quetiapine,

ziprasidone, resperidone or perphenazine showed that the common reasons for discontinuing medications was lack of effect or intolerance. Olanzapine had lower discontinuation rate but had different set of side effects but other SGAs were similar to each other and to perphenazine in terms of effectiveness.⁵³ A study done by Peter et al. to see the effect on QOL of atypical versus conventional neuroleptic medications in subjects with schizophrenia showed that there was no disadvantage in terms of QOL, symptoms and associated costs of care in using first generation antipsychotics rather than second generation.⁵⁴ An observational study by Kilian et al. supported this study.⁵⁵ Ann and Ahemed compared QOL in schizophrenia patients on first and second generation antipsychotics taking 50 patients on conventional medication and 76 patients on atypical antipsychotic medication. Atypically treated patients showed better QOL than conventionally treated patients.⁵⁶ Study by Nuss and Tessier concluded that use of amisulpride in schizophrenia improves the overall QOL.⁵⁷ It has been seen in most of the studies that newer antipsychotics results in better QOL and functional outcome. They have good tolerability, less side affects but they are costly in comparison to conventional antipsychotics which can affect the long term compliance of medication. Moreover QOL doesn't depend solely on medications but on resources of rehabilitation and social adjustment.

QOL in Deficit and Non-deficit Schizophrenia

In 1980s deficit schizophrenia was described. This subtype of schizophrenia was characterized by prominent idiopathic or primary negative symptoms. On the other hand nondeficit schizophrenia was characterized by prominent positive symptoms. Patients with deficit schizophrenia differ from other patients of schizophrenia in terms of risk factors, course of illness, family history, functional and structural variables, neurocognitive measures and response to treatment. There is less comorbidity with substance abuse, anxiety and depression. Delamillier et al. assessed QOL in 30 deficit and 112 nondeficit schizophrenia patients. The two groups of patients did not wary in terms of general psychopathology, total score of positive symptoms, or QOL. It was suggested that primary negative symptoms has no impact on subjective QOL.⁵⁸

QOL and relapse in schizophrenia

Boyer et al. (2013) reported that in schizophrenia patients at 2 years follow up QOL as assessed by SF 36 is an independent prognosticator of recurrence of the illness. This area requires further evaluation.

Conclusion

QOL is a vital concept in Psychiatry. Since disorders like Schizophrenia may not respond completely to therapy in many cases the stress is now on improving the QOL of patients. Studies indicate that QOL in schizophrenia is affected by a number of factors including negative, positive and cognitive symptoms, insight, type of medication, side effects of medications, poor physical conditions, psychological state, environmental factors as well as lack of social support.

References

1. Verma PK, Walia TS, Chaudhury S, et al. Family psychoeducation with caregivers of schizophrenia patients: Impact on perceived quality of life. *Ind Psychiatry J* 2019 Jan-Jun;28(1):19-23.
2. Chaudhury S, Das PR, Murthy PS, et al. Quality of life in psychiatric disorders. *Journal of Trends in Biomedical Research* 2018;1(1):1-4.
3. Das PR, Chaudhury S. Quality of Life in Schizophrenia. *RINPAS Journal* 2012;4(1):183-92.
4. Sartorius N. Rehabilitation and quality of life. *Hospital and Community Psychiatry* 1992;43:1180-81.
5. Lehman A. A quality of life interview for the chronically mentally ill. *Evaluation and Programme Planning* 1988;11:51-62.
6. Sullivan G, Wells K, Leake B. Quality of life of seriously mentally ill persons in Mississippi. *Hospital and Community Psychiatry* 1991;42:752-55.
7. Koivumaa-Honkanen HT, Viinamäki H, Honkanen R et al. Correlates of life satisfaction among psychiatric patients. *Acta Psychiatr Scand*. 1996 Nov;94(5):372-8.
8. Bengtsson-Tops A, Hanson L. Subjective quality of life in schizophrenic patients living in the community: Relationship to clinical and social characteristics. 1999 Sep;14(5):256-63.
9. Leisse M, Kallert TW. Social integration and quality of life of schizophrenic patients in different types of complementary care. European Psychiatry 2000 Dec;15(8):450-60.
10. Priebe S, Roeder-Wanner U, Kaiser W. Quality of life in first-admitted schizophrenia patients: A follow-up study. *Psychological Medicine* 2000 Jan;30(1):225-30.
11. Meltzer H, Burnet S, Bastani B et al. Effects of six months of clozapine treatment on the quality of life of chronic schizophrenic patients. *Hosp Community Psychiatry*. 1990 Aug;41(8):892-97.
12. Brown S, Roe M, Lane A, et al. Quality of life in schizophrenia: Relationship to socio-demographic factors, symptomatology and tardive dyskinesia. *Acta Psychiatr Scand*. 1996 Aug;94(2):118-24.
13. Skantz K, Malm U, Dencker S, et al. Comparison of quality of life with standard of living in schizophrenic outpatients. *Br J Psychiatry*. 1992 Dec;161:797-01.
14. Shtasel P, Gur R, Gallacher F, et al. Gender differences in the clinical expression of schizophrenia. 1992 Sep;7(3):225-31.
15. Solanki RK, Singh P, Midha A, Chugh K. Schizophrenia: Impact on quality of life. *Indian J Psychiatry*. 2008 Jul;50(3):181-6.
16. Kumar B, Muke SS, Kiran M, et al. Stigma and Quality of Life in Schizophrenia Patients. *RINPAS Journal* 2012;4(1):67-73.
17. Packer S., Husted J., Cohen S., et al. Psychopathology and Quality of life in Schizophrenia. *J Psychiatry Neurosci*. 1997 Jul; 22(4):231-34.
18. Dikerson FB, Ringel NB, Parente F. Subjective quality of life in outpatients with schizophrenia: clinical and utilization correlates. *Acta Psychiatrica Scandinavica* 1998;98:124-27.
19. Roder-wanner UU, Priebe S. Objective and subjective quality of life of first admitted women and men with schizophrenia. *Eur Arch Psychiatry Clin Neurosci*. 1998;248(5):250-58.
20. Hayhurst KP, Massie JA, Dunn G, et al. Validity of subjective versus objective quality of life assessment in people with schizophrenia. *BMC Psychiatry*. 2014 Dec 24;14:365.
21. Ritsner M. Predicting changes in domain-specific quality of life of schizophrenia patients. *Journal of Nervous Mental Disease* 2003;191:287-294.
22. Baker F, Intagliata J. Quality of life in the evaluation of community support systems. *Eval Program Plann*. 1982;5(1):69-79.
23. Awad AG, Voruganti LNP, Heslegrave RJ. A conceptual model of quality of life in schizophrenia: Description and preliminary clinical validation. *Qual Life Res*. 1997 Jan;6(1):21-26.
24. Lambert M, Naber D. Current issues

in schizophrenia: Overview of patient acceptability, functioning capacity and quality of life, *CNS Drugs*. 2004;18 Suppl 2:5-17.

25. Fitzgerald PB, Williams CL, Corteling, et al. Subject and observer rated quality of life in schizophrenia. *Acta Psychiatrica Scandinavica*, 2001;103:387-92.

26. Norman RM, Malla AK, Mcclan T, et al. The relationship of symptoms and level of functioning in schizophrenia to general well being and quality of life scale. *Acta Psychiatr Scand*. 2000 Oct;102(4):303-09.

27. Ritsner M, Kurs R, Gibel A, et al. Validity of an abbreviated Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q-18) for schizophrenia, schizoaffective, and mood disorder patients. *Qual Life Res*. 2005 Sep;14(7):1693-03.

28. Sim K, Mahendran R, Siris SG, et al. Subjective quality of life in first episode schizophrenia spectrum disorders with comorbid depression. *Psychiatry Res*. 2004 Dec 15;129(2):141-47.

29. Patterson TL, Shaw W, Semple SJ, et al. Health related quality of life in older patients with schizophrenia and other psychoses: relationship among psychosocial and psychiatric factors. *Encephale*, 1997;30:60-68.

30. Nopoulos P, Flaum M. Two year outcome in first episode schizophrenia. *American Journal of Psychiatry* 1998;155:1196-01.

31. Kasckow JW, Twamley E, Mulchahey JJ, et al. Health-related quality of well-being in chronically hospitalized patients with schizophrenia: comparison with matched outpatients. *Psychiatry Res*. 2001 Aug 5;103(1):69-78.

32. Lehman A. The effects of psychiatric symptoms on quality of life assessments among the chronic mentally ill. *Eval Program Plann*. 1983;6(2):143-51.

33. Lehman A. The well-being of chronic mental patients: Assessing their quality of life. *Arch Gen Psychiatry*. 1983 Apr;40(4):369-73.

34. Reine G, Lancom C, Tucci S, et al. Depression and subjective quality of life in chronic phase schizophrenic patients. *Acta Psychiatr Scand*. 2003 Oct;108(4):297-03.

35. Hofer A, Kemmler G, Eder U, et al. Quality of life in schizophrenia: the impact of psychopathology, attitude toward medication, and side effects. *J Clin Psychiatry*. 2004 Jul;65(7):932-39.

36. Gorna K., Jaracz K., Wrzyszczyńska L., et al. Quality of life and Depression in Schizophrenic Patients. *Advances in Medical Science* 2007;52 Suppl 1:1-4.

37. Lim MWZ, Lee J. Determinants of Health-Related Quality of Life in Schizophrenia: Beyond the Medical Model. *Front Psychiatry*. 2018 Dec 18;9:712.

38. Browne S, Clarke M, Gervin M, et al. Determinants of quality of life at first presentation with schizophrenia. *Br J Psychiatry*. 2000 Feb;176:173-76.

39. Ho B, Nopoulos P, Flaum M, et al. Two-year outcome in first-episode schizophrenia: predictive value of symptoms for quality of life. *American Journal of Psychiatry* 1998;155:1196-01.

40. Cruz BF, Resende CBD, Carvalhaes CF, 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 de Psiquiatria*. 2016;38:216-21.

41. Suttajit S Pilakanta S. Predictors of quality of life among individuals with schizophrenia. *Neuropsychiatric Disease and Treatment* 2015;11 1371-79.

42. Marianne SG, Thomas ES, James WH, et al. Quality of Life in schizophrenia: Symptom, insight and neuropsychological determinants. *Schizophrenia Res* 1997;24:223.

43. Doyle M, Flanagan S, Browne S, et al. Subjective and external assessments of quality of life in schizophrenia: Relationship to insight. *Acta Psychiatrica Scandinavica* 1998;99:466-72.

44. Ilanit H, Shlomo K, David R, et al. Insight into psychosis and quality of life. *Comprehensive Psychiatry* 2006;47:265-69.

45. Yen CF, Cheng CP, Huang CF, et al. Quality of life and its association with insight, adverse effects of medication and use of atypical antipsychotics in patients with bipolar disorder and schizophrenia in remission, *Bipolar Disord*. 2008 Jul;10(5):617-24.

46. Ashley H, John K, Ian F, et al. Insight, Quality of life and Functional capacity in middle aged and older adults with schizophrenia. *Internal Journal of Geriatric Psychiatry* 2008;23:760-65.

47. Lysaker PH, Pattison ML, Leonhardt BL, Phelps S, Vohs JL. Insight in schizophrenia spectrum disorders: Relationship with behavior, mood and perceived quality of life, underlying causes and emerging treatments. *World Psychiatry*. 2018 Feb;17(1):12-23

48. Catherine FA, Boyer L, Jonathan W, et al. Neural substrate of quality of life in patients with schizophrenia: A magnetisation transfer imaging study. *Scientific Reports* 2015;5:17650.

49. Jun SK, and Jung SC. Social functioning and quality of life as measures of effectiveness in the treatment of schizophrenia. *World Psychiatry*. 2009 Feb;8(1):35-36.

50. Michael R, Alexander P, Jean E, et al. The impact of side effects on life satisfaction of schizophrenia patients: A naturalistic study. *European Neuropsychopharmacology* 2002;12:31-38.

51. Rosenheck R, Perlick D, Bingham S, et al. Department of veterans affairs cooperative study group on the cost effectiveness of olanzapine. Effectiveness and cost of olanzapine and haloperidol in the treatment of schizophrenia: A randomized controlled trial. *Journal of American Medical Association* 2003; 290:2693-2702.

52. Inwon C, Meon K, Tongwoo S, et al. Effect of antipsychotics on the quality of life of schizophrenic patients in community mental health centers: Conventional versus atypical antipsychotics. *Clinical psychopharmacology and neuroscience* 2004;2:1.

53. Lieberman JA, Stroup TS, McEvoy JP et al. Clinical antipsychotic trials of intervention effectiveness (CATIE) investigators: Effectiveness of antipsychotic drugs in patients with schizophrenia. *New England Journal of Medicine* 2005;353:1209-23.

54. Peter BJ, Thomas RE, Linda D, et al. Randomized controlled trial of the effect on Quality of life of second versus first generation antipsychotic drugs in schizophrenia. *Achieves of General Psychiatry* 2006;63:1079-87.

55. Kilian R, Dietrich M, Toumi M, et al. Quality of life in persons with schizophrenia in out patient treatment with first or second generation antipsychotic. *Acta Psychiatr Scand.* 2004 Aug;110(2):108-18.

56. Ann M, Ahmed OA. Quality of life in schizophrenia on conventional versus atypical antipsychotic medication: A comparative cross sectional study. *Internal journal of social psychiatry* 2007;53:99-07.

57. Nuss P, Tessier C. Antipsychotic medication, functional outcome and quality of life in schizophrenia: Focus on amisulpride. *Current Medical Research and Opinion*, 2010;24:787-01.

58. Delamillieure P, Ochoa TD, Vasse T, et al. The subjective quality of life in deficit and nondeficit schizophrenic patients. *European Psychiatry* 2005;20(4):346-48.

59. Boyer L, Millier A, Perthame E, et al. Quality of life is Predictive of relapse in schizophrenia. *BMC Psychiatry*. 2013 Jan 9;13:15.

A Study on Sociopaths

Mayukh Pandit¹, Anil Kumar Agrawal²

Abstract

Our universe is diverse in nature with lot's of beautiful minds. But sometimes due to various circumstances this mind could be affected with some sort of mental disorders. Likewise a famous disorder known as antisocial personality disorder was observed which includes two broad terms sociopath and psychopath. This article describes on the lives of sociopath and behavior, aetiology of such disorder, treatment procedures and at last conclusion which elicits a positive attitude towards this disorder.

Keywords: Antisocial personality disorder; Sociopath; Psychopath.

How to cite this article:

Mayukh Pandit, Anil Kumar Agrawal. A Study on Sociopaths. RFP Indian Journal of Medical Psychiatry. 2019;2(2-3):69-71.

Introduction

The term Sociopath is made up of two words, i.e. Socio and Path. Socio means social in simple terms but path is derived from Greek word pathos which means 'sick and suffering'. In general terms sociopaths are group of people who are suffering from psychiatric disorders where they manifest themselves with antisocial personality. Basically sociopath are described as someone who have antisocial personality disorder (ASPD). According to Diagnostic & Statistical Manual of Mental Disorder (DSM), antisocial personality disorder is a personality disorder characterized by long term pattern of disregard for or violation of rights of others.¹

Those with antisocial personality disorder shows symptoms at early age but this is such a worse type

of condition which could be only diagnosed at adolescence stage. Their behaviour is often shaped by environmental factors mostly exposure to abuse or expedient behaviour.

Discussion

The simplest way to conceptualize any psychiatric disorder is disturbance of Cognition, Conation and Affects or any disequilibrium between three.² Similarly Sociopathy is a broad term which refers to a pattern of antisocial behaviour and attitude including manipulative behaviour which often arises from environmental factors. The general epidemiology of anti social personality disorder is seen in 3% to 30% of psychiatric disorder.³ Sociopathy is often conceptualized as diagnosis but it is not a formal diagnosis. It is invoked

Author's Affiliation: ¹UG Researcher, Department of Anatomy, ²Reader, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

Correspondence and Reprint Requests: Anil Kumar Agrawal, Reader, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

E-mail: mayukhpandit17@gmail.com

indiscussing people on anti social spectrum who generally display callous behaviour with little regard for others.

There are behaviour which are very significant in the lives of sociopath which includes under followings.⁴

They always have high manipulative skills and they often appear to be charming. They are often to see dominant and humiliate their victims.

- There is always a significant pathological lying which is seen in sociopathic behaviour. They are extremely convincing and they could even pass the lie detector test.
- They have lack of remorse, shame or guilt.
- They have lack of empathy and they often show callous behaviour.
- They have criminal versatility. They change their image as needed to avoid prosecution. They can even change their life story readily.
- They never blame themselves but blame others even for acts that they had obviously committed.
- They usually has a history of behavioural and academic difficulties.
- Verbal outburst and physical punishments are normal in sociopathic patients.
- They behave they are all powerful they know everything, there is no sense of personal boundaries, no concern for their impact on others.

There is always a misconception regarding differences between psychopath and sociopath.

Both have the common traits of antisocial personality disorder, but they differ in in the traits of behavioural characteristics.

Psychopaths are very calculative in nature. They always plot their moves. They might use aggression but in a laid plan way to get what they want. So they are often termed as 'cold hearted'. Their soul mission is to manipulate others for personal gain, they are also known as skilled actors. On the contrary sociopaths are often term as 'hot headed'. They just express themselves without thinking how others would be affected.⁵

According to Web MD, a key difference between a psychopath and sociopath is whether he has a conscience. Psychopath doesn't have conscience. Whereas sociopath has conscience, but it's week. They might feel some guilt or remorse, but that doesn't affect their behaviour.

Another misconception regarding antisocial personality disorder is based on their violent instinct. Some people with antisocial personality disorder could be violent but on a general as most of them are found to be not.

They are seen to be use their manipulative behaviour to get what they want. They have no empathy they can hurt anyone to achieve their needs. But if one follows on history of sociopathy violence record, John Gacy name would be highlighted. He used to entertain kids as a clown at birthday parties. People adored him. He was one of the most famous sociopath to ever walk on earth. In 1970 he murdered 32 young men and buried most of them in crawl space under his house. History also had shown authors like Jack Henry Abbott who wasn't a serial killer but crime of forgery sent him to the prison. Where he stabbed someone upon escaping from prison. He died by suicide in prison in 2002, but his sociopath charm lives on. His famous quote on section of brainy quotes was quoted as 'One morning I woke up and plunged into psychological shock. I had forgotten I was free'.⁶

Treatments

The treatment for sociopathy is very challenging because it is mostly diagnosed at very last stage of life that is for 40s and beyond.

Psychotherapy is the only therapy which is highly recommended for antisocial personality disorder. Psychotherapy always help the patient with proper management to resist negative behaviour and thoughts. They also improve the patient to develop interpersonal skills, the area where they might lack. Supreme goal should be to reduce the impulsive behaviour which makes sociopath often hostile and versatile. There are no medication which have been approved by FDA to treat antisocial personality disorder. There are medication which might help reduce aggressive and impulsive behaviour. This includes mood stabilizers and antidepressants. The only treatment with very high success rate would be proper support from family and friends. Family members should also be counselled to improve communication with the patient. Love and faith of the family members and friends can cure this condition to some extent.⁷

Conclusion

There is no way to prevent this antisocial personality disorder. There are even no exact cause known for

this disorder. But antisocial behaviour is thought to have its root in childhood so it becomes necessary for parents, teachers and paediatricians who should be able to spot the early warning signs so that it might help to identify those at risk. It often discourages if one had loved ones with antisocial personality disorder. With proper psychotherapy, patient with antisocial personality disorder do learn to form strong bonds and positive relationships, be more responsible and respect the boundaries of others. So if your loved ones are suffering from this condition one must consult with mental health professionals who would cure your loved ones so that they lead a prosperous life and stay physically and mentally healthy ahead.

Acknowledgment

1. Dr Sanjay B Nyamati (Honorable Dean)
2. Dr Abhishek Banerjee (Oral and Maxillofacial pathologist)
3. Dr Megha Bahal (P.G Student)

References

1. Diagnostic and statistical manual of mental disorders (DSM).
2. Niraj Ahuja. A short textbook of Psychiatry. Jaypee Publishers 5th edition.
3. Internet mental health antisocial personality disorder, archived, mental health.com
4. R Preston. Profile of sociopath. MacAfee.
5. Kara Mayer Robinson. Archives. WebMD.
6. Tanya J Peterson. Healthy place.
7. Kathleen Smith PhD. PSYCOM.

<i>Revised Rates for 2020 (Institutional)</i>		Frequency	India(INR)	India(INR)	Outside India(USD)	Outside India(USD)
Title of the Journal			Print Only	Online Only	Print Only	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 Food Additives and Contaminants		2	6000	5500	430	391
Journal of Food Technology and Engineering		2	5500	5000	430	391
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	8000	7500	625	575
Journal of Psychiatric Nursing		3	6000	5500	469	430
Journal of Radiology		2	8500	8000	664	625
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 Gastroenterology International		2	6500	6000	508	469
RFP Indian Journal of Hospital Infection		2	13000	12500	1016	977
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 Gerontology and Geriatric Nursing		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

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: 91-11-45796900, 22754205, 22756995, E-mail: sales@rfppl.co.in, Website: www.rfppl.co.in

A Case Study on a Patient of Suicide Disease

Arindam Mandal¹, Mayukh Pandit²

Abstract

Suicide disease also known by the name of Trigeminal neuralgia, Tic Doloureux, Fothergill disease. This is such a worse type of condition where it is characterized by sudden attack of pain lasting from few hours to several days and confined to distribution of one or more divisions of the trigeminal nerve. A case report was taken and reported on the basis of patients condition of Trigeminal neuralgia. An analysis is recorded on this article about the aetiology and treatment there are seven surgical procedures and medications which are mentioned in the discussion part.

Keywords: Tic Doloureux, Fothergill disease.

How to cite this article:

Arindam Mandal, Mayukh Pandit. A Case Study on a Patient of Suicide Disease. RFP Indian Journal of Medical Psychiatry. 2019;2(2-3):73-74.

Introduction

Suicide disease as the name suggest a disease which is characterized by excruciating pain in the distribution of one or more branches of 5th cranial nerve, condition where pain becomes intolerable and patient becomes prone to develop psychiatric disorder which often leads to suicide. According to International headache society, TN is defined as painful unilateral affliction of face characterized by brief electric shock limited to divisions of one or more branches of trigeminal nerve.¹ This pain is known as world's worst pain a person can suffer and it is also believed that more than 50% of people have committed suicide after suffering from such chronic conditions.

Case Report

The following case describes a 55-year-old woman who came with severe pain on left side of her face, in mandibular division of Trigeminal nerve. Her statement was stabbing pain was felt on her left cheeks. Electric shock pain was also radiating and the pain was stimulated with biting and chewing undergoing masticatory forces. She is only working lady and this condition is disrupting her daily activities.

Then full dental examination was done. Cavity were filled and restorations are also performed. But no significant improvements were observed. Analgesics such as Ibuprofen was prescribed as initial treatment by junior physician which did not show any significant improvements.

Author's Affiliation: ¹Oral and Maxillofacial Oncosurgeon, DESUN Hospital, Kolkata, West Bengal 700107, India.

²UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

Correspondence and Reprint Requests: Mayukh Pandit, UG Researcher, Department of Anatomy, Triveni Institute of Dental Sciences Hospital & Research Centre, Bilaspur, Chhattisgarh 495001, India.

E-mail: mayukhpandit17@gmail.com

Patient was referred to neurologist where upon closer examination, trigger zones were observed on left area of nose, left upper lip and lower chin area.

There is no family history of genetic illness and any other neurological problems. Patient doesn't smoke or drink. She didn't underwent any surgeries in the area of head and neck. Reflex were also normal throughout and toes where going down. Blood pressure was absolutely normal.

A sense of palpation was felt around left lower part of jaw which caused slight acute pain. In primary investigation infraorbital and mental nerve block was given. The brief stabbing pain appear to be relieved which confirm the primary diagnosis of suicide disease. Final diagnosis was made from MRI scan with contrast which revealed a close association of superior cerebellar artery and trigeminal nerve on left part of patients face.

Thus case was concluded with diagnosis of Trigeminal neuralgia after brief investigation. Then medication was given as first line of treatment because of its low cost, doesn't require any invention and has good effective rate.

Discussion

Suicide disease which affects lots of life arises from compression due to multiple sclerosis or a tumour. Compression is created by superior cerebellar artery which offends 5th cranial nerve. This compression leads to demyelination and further development of Trigeminal neuralgia. Stabbing pain become so intolerable for the patient that they start developing psychiatric disorders this often leads to suicide ideation in patients. This pain is even stimulated by simple exposure of wind. Women gets more affected with this disease than men.

In treatment there are medication and surgical procedures available. Initially suicide disease are

treated with medication under followed.²

- Carbamazepine (Drug of Choice)
- Baclofen
- Phenytoin
- Gabapentin

In surgical procedures there are seven surgery which are performed to relief period of episodes of pain for longer duration more than medication. Out of all surgical procedures microvascular decompression surgery has the highest pain relief period up to 12 to 15 years. This surgery aims at separation of superior cerebellar artery from trigeminal nerve with the use of Teflon sponge.³ This procedure was proposed by Dr Peter Janetta in 1968.

Conclusion

Suicide disease is one of the world's most pain condition one can suffer. But there are treatments available which can relieve pain for longer period of time. We are also on a deep research for proper treatment of this condition. Patient of suicide disease must fight this disease with positive attitude and a good will. Suicide is not the single option of covering these pain, instead one must fight this battle against such disease and atlas victory would fetch happiness and prosperity in life.

References

1. International Headache Society. ICHD Classification ICHD-3.
2. Neelima Anil Malik. Textbook of Oral and Maxillofacial Surgery.
3. Fred G Barker, Peter Janetta. The New England Journal of Medicine.

Subject Index

75

Title	Page No
A Case Study on a Patient of Suicide Disease	73
A Study on Clinical Depression	49
A Study on Sociopaths	69
Attitude towards Mental Illness among Medical Students and Non Psychiatric Doctors	5
Collective Bargaining	29
Diabetes and Depression	53
Digital Detox: A Day without Applications	25
Gender Differences in Mania	19
Psychology of Suicidal Person	13
Quality of Life of Schizophrenia Patients: A Review	61
Suicide Disease (TN)	57

Author Index

Name	Page No	Name	Page No
Ajay Kumar Bakhla	19	Mayukh Pandit	73
Anil Kumar Agrawal	69	Poonam Rani Das	61
Arindam Mandal	49	Prarthana Bhat	53
Arindam Mandal	73	Raghuram Macharapu	5
Chetan Dewan	19	Subodh Kumar	19
Daniel Saldanha	61	Suprakash Chaudhury	19
Harish Rajendra Wade	13	Suprakash Chaudhury	61
Harish Rajendra Wade	25	Swaleha Mujawar	19
Hemendra Singh	53	Vijay kumar M	5
Mayukh Pandit	49	Vijay	19
Mayukh Pandit	57	Zeeshan Parvez Khan	29
Mayukh Pandit	69		

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 mentioned.
- 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
- 10) 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/17-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, Kälestål 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/HSQ20.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 10 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)