

ADDICTION SPECIAL



EDITORIAL

ADDICTION - A MENACE

Addiction is a pandemic that is least talked about. The age at which one can get addicted is coming down year by year. Ease of availability and peer pressure easily allure youngsters. Also, novelty (trying new things) leads to dopamine (the 'feel-good' hormone) release, and the reward system of the brain (explained in the 'neurobiology of addiction' article) leads to a vicious cycle of addiction.

The next generation is involved in substance abuse as well as drug peddling. Adolescents are getting addicted to drugs, nicotine, and alcohol. This may lead to or aggravate already existing mental illnesses. It may create mental health issues in the family as an addict might land into criminal behaviors and face financial crisis too. We as parents should be aware of the signs and symptoms of addictions. Most importantly we must establish healthy relations and communication with our wards.

The kids (and even elders) are also falling prey to cyberaddiction. The new varieties of additions are mind-boggling e.g., gaming, online gambling, pornography, vaping. Luckily, we have digital parenting courses where parents and teachers can train themselves and protect their children from cyber addictions.

As we are presenting this 'Addiction Special' to you on account of 'International Day against Drug Abuse and Illicit Trafficking', we urge all the stakeholders (parents, teachers, counselors, policymakers) to be vigilant and aware.

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-Dr. Aabha Pimprikar
Co-Editor.

RAG-AP: (ROTARY ACTION GROUP - ADDICTION PREVENTION) - A JOURNEY

Substance abuse and addiction of illicit drugs is a global problem and can only be addressed by the joint efforts of all worldwide organizations including governments. This is exactly why the RAG-AP (Rotary Action Group - Addiction Prevention) was founded in February 2013 (and recognised by Rotary International in January 2016). RAG-AP now operates in more than 42 countries and 45 districts.

RAG-AP India was formed in 2018. The core team consists of PRIPs Kalyan Banerjee (Chair, RAGAP-I), Jonathan Majiyagbe and Gary Huangput.

PDGs Ulhas Kolhatkar and Dr. Sandeep Kadam (20-21) from D3142; Deepak Purohit - D3131, Himanshu Thacker - D3060 made an action plan under the guidance of Psychiatrist Dr Ashish Deshpande. **D3142 became the lead district.**

This being a mammoth program; 'National Scientific Advisory Committee' was formed; involving all national experts in the field of De Addiction.

The focus area is called **NIDA (Nicotine, Internet, Drugs and Alcohol)**. Rotary became the nodal agency to bring together various resources in the community under the umbrella of Addiction Prevention and 'Deaddiction Connect' was born.

In the Rotary year 23-24, we intend to introduce deaddiction through club participation, tie ups with Rehabilitation centres and few hospitals for subsidized detoxification packages.

-Rtn. Pushan Vaidya
District Addiction Prevention Chair D3142

RAGMHI AT RI CONVENTION MELBOURNE 2023

Rotary International Convention is a place where you always find people of action from around the world; who bring solutions to some of the challenges being faced by the world. The Melbourne Convention was important for Rotary Action Groups on Mental Health Initiatives as RI President Elect Gordon McInally is launching mental health as his presidential initiative in the year 2023-2024.

To address the global pandemic, RAGMHI organized a panel discussion 'Let's talk mental health - prioritize mental health', on the 30th of May 2023 at the Melbourne Convention.

Bob Anthony (USA), Chair, RAG Mental Health Initiatives, Rev. Felix Kingsley Obialo (Nigeria), and myself (Rtn. Sharmila Seshadri, India) were the panellists. Philip Muneer Flindt (Denmark), Rotary Public Image Coordinator moderated the session.

The session was attended by 600 participants from all over the globe.

During the closing ceremony, RI President-Elect Gordon McInally cited the work done by RAGMHI and DAGMHI 3030, India. He appreciated the Global Grant Project - 'Wellness in a Box - Prevention of Depression, and Peer Leadership Program' initiated by RC Nagpur under the guidance of Rtn. Rita Aggarwal.



DGE Asha Venugopal D3030 and Sharmila at RAGMHI Booth

-Sharmila Sheshadri, Bangalore
President and Chair, DAGMHI 3190

DAGMHI 3030 REPORT

STRESS MANAGEMENT PROGRAM FOR NURSES

There is growing evidence of increased prevalence of psychological problems like stress, depression, anxiety, and substance abuse among medical professionals, especially in nurses. Many nurses also drop out due to burnout and inability to cope with the stress of dealing with home and workplace. It is really important that we take care of the mental health of nurses who are our **primary caregivers**.

On 12th May, 2023, "International Nurses Day" was celebrated with enthusiasm at Seven Star hospital, Nagpur. Dr Shantala Bhole, conducted an **interactive session on Stress Management** for all the nurses.

In addition to different strategies for dealing with stress, she also talked about the importance of exercise, sleep, meditation, various relaxation and visualization techniques. The session was concluded by a short breathing exercise to reduce stress rapidly.

Dr Bhole emphasized the **importance of talking about mental health problems and taking professional help in case of mental health issues** like anxiety, depression etc.

-Dr. Shantala Bhole
Director DAGMHI 3030

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THE NEUROBIOLOGY OF ADDICTION

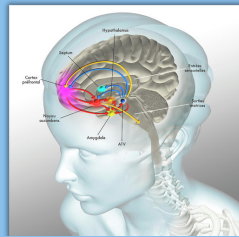
When we talk about addictions, generally the first thing that comes to mind is drugs and alcohol. But the field of addiction is much more than that. **The basis of all addictions lies in the reward system of the brain.**

Whenever exposed to a stimulus that is rewarding, the brain responds by releasing an increased amount of dopamine, the main neurotransmitter associated with rewards and pleasure. This dopamine travels to parts of our brain that is associated with emotions (Amygdala). This gives us a feeling of enjoyment & pleasure. This brain circuit is also connected to a region of the brain associated with storage of memory (Hippocampus) which is able to store the pleasurable feeling associated with the consumption of a drug or activity as a good memory. Thus all these areas work together to encourage the repetition of rewarding behavior.

As the associative pairing between the substance related cues and rewarding response develop this reinforces addictive behavior leading to changes in brain circuitry. Tolerance means that a person needs more and more substance to activate the reward circuit and thus produce the same pleasurable feeling. This can explain why chronic addicts need more quantity of substance over time. This mechanism explains cases of deaths due to accidental drug overdose. If a person using substance for a very long time decides to reduce its use suddenly or stop completely, withdrawal sets in.

This happens due to imbalance of neurotransmitters causing unwanted physical symptoms like disturbed sleep, tremors, sweating, palpitations, agitation etc. These unbearable symptoms unfortunately cause a person to start using substance again. Finally there develops anticipation and craving which plays a major role in relapse and recurrent drug use. This craving causes a lot of addicts to downgrade themselves to using substances of cheaper quality often becoming victims of poisonous impure liquor or poor quality drugs.

Recent scientific data suggests that addiction is more than repeated exposure to substances. It is the synchronization of intrinsic factors (genes, gender, age, preexisting mental health issues & history of addiction), Extrinsic factors (childhood trauma, education level, socioeconomic status, social support, easy availability of substance etc) and the nature and properties of the addictive substance itself. This may help in explaining why some individuals are more predisposed to develop addictive behaviors over others.



Artist: Fernando Da Cunha
(Science Photo Library)

-Dr Rucha Sule Khot
Consultant Psychiatrist, Nashik

ADDICTION IN ADOLESCENTS

It's frustrating, and heart-breaking, to see teens today just throw away their potential in the face of addiction.

The incidence of drug abuse among children and adolescents is higher than the general population. Nine out of ten people with substance addictions first begin using them before they even turn 18.

Children who have easy access to drugs or have seen their parents consume are more likely to consume banned substances. According to a report 13.1% of the people involved in drug and substance abuse are below 20 years. Children affected by substance abuse are considered as children in need of care and protection under the Juvenile Justice Act, 2000.

To rehabilitate a child indulging in substance abuse CHILDLINE number 1098 is active in India. Currently, Child Help Desks are operational at 144 railway stations and 9 bus terminals across India. Most people think of drugs and alcohol when they think of teen addiction. However, the illness of addiction can develop with some other rewarding behaviours as well. For instance, it's possible for a teen to become addicted to the following:

- **Internet:** Research indicates that nearly 33% of adolescents around the world are addicted to their devices. This includes social media, compulsive information seeking, dating apps etc.
- **Gaming:** This type of addiction is the excessive use of video games. 1 in 10 teenagers who play video games are addicted.
- **Gambling:** According to YouthGambling.com, 4-7% of teens exhibit gambling addiction behaviour, which include enjoying the rush of gambling; using the earnings of a win to stay in the game, versus walking away, and relying on loans from friends and families.
- **Shopping:** Problem shopping appears fairly common among high school students and is associated with symptoms of depression and a range of potentially addictive behaviours. The overall prevalence of problem shopping is 3.5% of adolescents.
- **Sex:** Teenagers are naturally sexually curious. Sex addiction in teens presents as engaging in a pattern of self-destructive and/or high-risk sexual activities or indulgence like watching porn, masturbation etc.

There are various treatment methods for a behavioral addiction as well as alcohol or drug abuse. There are also rehabilitation centers that focus strictly on specific addictions. Seeking assistance from a mental health professional can help break the cycle and facilitate recovery.

-Khushi Agrawal, Psychologist.



ADDICTION AND MENTAL HEALTH

Addiction is a disease that affects not only the individual but the whole family. Apart from financial insecurities, mental health is affected severely. The family members face emotional trauma. They experience mistrust, fear, and self-blame.

- **The addict:** Substance use may cause mood swings and paranoia. The addict may become irritable, may argue and at times turn violent. They may isolate themselves from their family and engage in manipulative behavior.
- **Spouse:** experience helplessness, anger, and agitation. They develop emotional distance from their partner.
- **Children:** grow in unpredictable environments as they face physical and emotional abuse. They become emotionally unstable. They develop a lack of trust and confidence. On the other hand, they may grow up prematurely due to the role reversal of taking care of their addict parent.

- **Siblings:** are invisible victims of addiction as parents are occupied with the child who is addicted. They are confused and frustrated, they feel ashamed. Few may use the substance to draw parents' attention or escape the stress and the pain.

- **Parents:** develop guilt as they feel they went wrong somewhere as parents. They constantly worry about the safety and well-being of the family.

The Diagnostic and Statistical Manual of Mental Disorders (DSM5) checklist is an 11-item questionnaire that measures the degree (mild, moderate, severe) to which an individual meets the diagnostic criterion for a substance use disorder.



DSM-5 Checklist for Substance Use Disorder

Dr. Aabha Pimprikar
Co-Editor

PSY-BER MATTERS

THE PSYCHO-NEUROLOGY OF CYBER-ADDICTION: UNDERSTANDING ITS IMPACT



Cyber addiction refers to the excessive and compulsive use of digital devices and online platforms, leading to negative consequences in various aspects of an individual's life. Psychologically, cyber addiction can be driven by factors such as the need for social validation, escape from reality, and the instant gratification provided by online activities. Neurologically, engaging in prolonged digital interactions triggers the release of dopamine, a neurotransmitter associated with pleasure and reward, reinforcing addictive behavior.

Cyber addiction has significant implications for mental health. Individuals who excessively use the Internet or engage in online gaming may experience symptoms akin to substance addiction, such as withdrawal, preoccupation, and loss of control. This addiction can also lead to a decline in academic or work performance, social isolation, anxiety, depression, and sleep disturbances.

Studies have shown that cyber addiction can alter brain structures and functions. Neuroimaging studies have revealed changes in the prefrontal cortex, which is responsible for decision-making, impulse control, and emotion regulation. Additionally, excessive Internet use has been linked to disruptions in the brain's reward system, leading to tolerance and craving. The constant stimulation from digital devices can also negatively impact attention span, memory, and cognitive abilities. Long-term effects may include rewiring of neural pathways and an increased susceptibility to other addictive behaviors. In addition to that, the SEO algorithms create a continuous cycle of prompts that supply a user with videos, reels and pages that the user has previously seen, liked or searched for. Each video/page prompt creates a sense of excitement due to dopamine surge and the person is compelled to continue watching the screen. This is another cause of addiction.

The psycho-neurology of cyber addiction underscores the complex interplay between psychological and neurological factors contributing to this phenomenon. Recognizing and addressing cyber addiction is crucial for promoting mental well-being and establishing a healthy relationship with technology. Effective interventions should focus on therapy, digital detox, and fostering a balanced approach to Internet use, ensuring individuals can harness the benefits of technology while mitigating its potential harms.

-Dr. Geetanjali Jha, Co-editor,
Cyberpsychology Researcher and Digital Parenting Expert
at iMature EdTech.

BREAKING THE CHAINS OF DEPENDENCY: UNDERSTANDING FOOD ADDICTION



Food addiction is a widespread problem in today's fast-paced world, impacting people of all ages.

It is characterised by **compulsive and uncontrollable desires for certain foods, notwithstanding harmful effects**. Food addiction involves the **brain's reward system, certain high fat, sugar and salt (HFSS) release dopamine, a neurotransmitter associated with pleasure and reward**. Over time, people may need more addictive foods to feel satisfied. It can be caused by a mix of biological, psychological, and environmental factors, such as genetic predisposition, psychological variables, easy availability of highly processed foods, deft marketing strategies, and societal norms that favour overconsumption.

Food addiction can have serious effects for one's physical health, causing weight gain, obesity, and other health problems. Additionally, the emotional and psychological costs of food addiction can lead to low self-esteem, anxiety, sadness, and a lower quality of life. The social consequences of food addiction can be severe, resulting in broken relationships, isolation, and feelings of shame or guilt.

Overcoming food addiction requires a multifaceted approach that addresses the root causes and promotes better habits. Some effective tactics:

- Talking to dietitians, therapists, and addiction specialists can help during recovery.
- Understanding the foods that cause addiction can help to avoid or moderate them.
- Mindful eating involves focusing on taste, texture, and satiety cues. This disrupts unconscious feeding habits.
- Gradually replacing addictive foods with healthier ones may satisfy cravings and provide nutrients. New flavours and cooking methods can ease the transition.
- Meditation, exercise, and hobbies reduce emotional eating triggers.
- Long-term lifestyle changes can create durable behaviours and enhance overall well-being.

Difficult though, ultimately, individuals can break free from the chains of dependency and create a healthier relationship with food by identifying the reasons, consequences, and implementing effective techniques.

Keep in mind that any action taken towards recovery is a step in the direction of a healthier & prosperous life.

Dr Sripriya Shaji Ph.D
Counselling Psychologist & Nutritionist,
Kerala.

MUKTANGAN REHABILITATION CENTRE, PUNE, MAHARASTRA.

Muktangan Rehabilitation Centre was started in 1986 by Dr. Anil Awachat, Anita Awachat, and Dr. Anand Nadkarni. It offers a month-long program for de-addiction to almost 30 inmates coming in every week.

During the month, the inmates (we call them 'friends' and not patients) have a specific daily routine. Our friends start their day with Yoga in the morning and physical activities in the evening.

For mental and emotional health, a specific syllabus is followed. They undergo group therapies, which includes, 'how to manage triggers, how to manage emotions, self-introspection, etc'. Art Based Therapies, Drum Circles, and Dance Movement Therapies are also part of the syllabus.

They go through Individual counselling at least 3 times a week. Whenever required, our team of psychiatrists take care of psychological comorbidities where medicines can help. There are 26 followup centres all over Maharashtra where the friends visit post-discharge.

Dr. Anita Awachat, Founder, used to say 'learn from our friends', understand their needs and accordingly plan the treatment. Muktangan still follows this unique principle.

Muktangan believes that 'Precaution is better than Cure'. Hence, the team also conducts Awareness Programs.

At the time of the foundation of Muktangan, the average age of addicts was 30+, but unfortunately it has come down to 15 years now. Earlier majority inmates were males; but in 2009 we had to start a separate wing for females. For the last 8-10 years, cases of behavioural addiction have also started coming in.

Renowned author Pu.L. Deshpande who was instrumental in founding Muktangan told the team to work hard, so that one day this centre should be closed down and no one needs it. The whole team of Muktangan works with that dream in our mind that one day our society will be addiction free.

As Dr. Anil Awachat once quoted, 'miracles happen every day' and we experience that with so many success stories in Muktangan. This motivates us to work hard towards our dreams.



-Sonali Kale,
Coordinator and Counselor
Muktangan Rehabilitation Centre.

NIDAR: NICOTINE, INTERNET, DRUGS AND ALCOHOL – RETHINK

Addictive substances and behaviors (Internet use, gambling, pornography etc) are posing a huge challenge to all communities. Early exposure to addictive substances, lack of information about such substances, extreme views on permissiveness, myths about consumption and their effects, lack of awareness even amongst health care workers about early stages of problem use and its progressive, relapsing nature; compound the 'burden of the problem'. May it be individual health, family health or community health! And these vices travel faster than our prayers!

NIDAR is a **Rotary facilitated community coalition of like minded people** from medical fraternity, judiciary, media, education, administration, police, corporates, NGOs; virtually all stakeholders! Its only purpose is to create aware societies. NIDAR makes each of the above members aware of their role in prevention, early detection, creating treatment & rehabilitation opportunities for the afflicted people.

Project NIDAR has **Health NIDAR**- capacity building of health care workers, **School NIDAR**- school substance use prevention effort and **Community NIDAR**- getting the influencers within the community to uphold the initiative. It is based on the Centre of Disease Control (CDC) 'Logic Model' and principles of 'Community Coalitions' and approved by National Scientific Committee Addiction Prevention (NSCAP), India. It is driven as a pilot project in Rotary District 3142 under the aegis of **Rotary Action Group Addiction Prevention (RAG-AP), India** and is designed by my team at Centre for Mental Health Advocacy Research & Treatment Services (CMHARTS). It empowers the communities to work with the local protective factors and overcome the local risk factors. Substance Use related problems creep into the communities because of human naiveties and human greed. Obviously the solution can't be in incarceration or criminalisation of a few. **An aware and responsible society is according to NIDAR the only solution.** NIDAR is about strong hearted and like minded people coming together! JOIN US AND BECOME A NIDAR!

-Dr Ashish Deshpande
Consultant Psychiatrist, Director, CMHARTS

RRR PATTERN FOR DE-ADDICTION

This article describes the simple, effective and scientifically proven RRR (Reason, Research, Replace) strategy.

1. Reason

Identify the 'WHY'. Ask yourself why you want to get rid of this bad habit. Search for the disadvantages of this habit. Eg Disadvantages of mobile addiction lead to sleep dysfunction, low concentration, poor memory, and physical health deterioration.

2. Research

Find out 'HOW'. Look for reliable websites, books and journals to research for ways in which you can manage your addictive behaviour. Research for ways to keep your stress at bay in a healthy manner so that you don't go back to the addiction due to stress and anxiety.

3. Replace

Replace your bad habit with a good one. Eventually, as the old habit fades away, its memory will also go.

For example: reading a book instead of spending time on mobile, shutting down the mobile or using a time tracker, keeping the mobile in the drawer or another room.

This is how you can navigate yourselves out of the trap of a vicious cycle of bad habits by implementing the RRR pattern!

-Dr. Yojana Shaha
Homeopath, REBT Specialist, Pune

F-ACTUAL

According to the **survey through the National Drug Dependence Treatment Centre (NDDTC) of the All India Institute of Medical Sciences (AIIMS)** in 2018 -

1. 58 crore children aged between 10 and 17 years are addicted to substances.
2. Alcohol is the most commonly used psychoactive substance.
3. About 16 crore people consume alcohol and more than 5.7 crore individuals are affected by harmful or dependent alcohol use and need help.
4. 3.1 crore individuals use cannabis products and about 25 lakhs suffer from cannabis dependence.
5. 2.26 crore people use opioids and approximately 77 lakh individuals require help for opioid use problems.

According to reports published in the **Journal of the American Medical Association** (updated in May 2023):

1. Roughly 50 percent of individuals with severe mental disorders are affected by substance abuse.
2. 37 percent of alcohol abusers and 53 percent of drug abusers also have at least one serious mental illness.
3. Of all people diagnosed as mentally ill, 29 percent abuse alcohol or drugs.

Vaping Statistics:

1. In 2011, 7 million people used e-cigarette worldwide. By 2018, this number has reached 41 million. -World Health Organization, 2018.
2. Worldwide vaping sales were worth \$15.7 billion in 2018 and are expected to reach \$40 billion by 2023. -The Lancet, 2019.
3. Use of e-cigarettes has increased from 0.6% to 10.5% in middle school students and from 1.5% to 27.5% (33% from 2018) in high school students. - American Lung Association Analysis of CDC data from 2011 to 2019.

-Dr. Aabha Pimprikar
Co-editor

BOOK REVIEW

THE ALCOHOLISM AND ADDICTION CURE BY CHRIS PRENTISS.

In this book Chris Prentiss, the author talks about how his son Pax Prentiss got hooked on marijuana and occasional beer when he was 15 years old and by the age of 18 years he was addicted to heroin. For the next 6 years, he put Pax in a 1-month, 2 months, 3 months program at rehabs but nothing worked. At times he came out clear but then relapsed again. He met every specialist and realised that nobody *investigated the probable cause of the substance abuse.*

"Alcohol and drugs are not the problems; they are what people are using to help themselves cope with the problems. Those problems always have both physical and psychological components- anything from anaemia, hypoglycaemia, or a sluggish thyroid to attention deficit disorder, brain-wave pattern imbalances, or deep emotional pain."

Consuming a substance and being Substance Dependent are two different terms which have been explained very clearly. What I liked about the book was that it spoke about Four Causes of Dependency which I haven't come across in any other books.

Cause 1: Chemical Imbalance

Cause 2: Unresolved events from the past

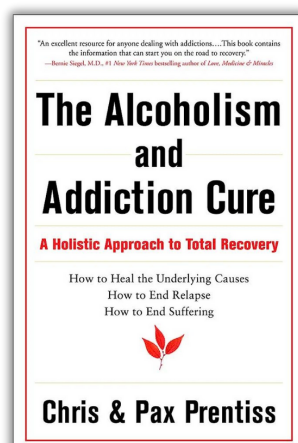
Cause 3: Beliefs you hold that are inconsistent with what is true

Cause 4: Inability to cope with current conditions.

If anyone wishes to come out of any addictions, they just need to focus on these above four causes because the solutions are within you and all that needs to be done is to access and explore them for solutions.

The book also talks about **creating a Holistic Recovery Program which is personalised to achieve total recovery and optimum health.** Knowing one's body and what it is reacting to is one of the most important topics which is discussed in this book along with many other inclusion of modalities and therapies.

-Dr Aliakbbar Maimun
Integrated Health Coach, Nagpur
Specializing in Addiction and Psychological Issues.



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