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Overcoming Addiction: A Case Report on Tobacco Cessation in a Middle-Aged Man

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Abstract: This case report delves into the intricate journey of MR, a 56-year-old individual deeply entrenched in the struggle to liberate himself from the shackles of a long-standing tobacco addiction. MR's life story is one marked by the persistent grip of nicotine, manifesting in a series of physical and psychological tribulations. Over the years, MR had grappled with irritability, a range of somatic complaints, and recurrent spells of despondency, all intricately interwoven with his compulsive smoking behaviour. Through a series of meticulous assessments, it became apparent that MR's nicotine dependence had escalated to severe levels, profoundly impacting various facets of his life. Unravelling the threads of his history, it was revealed that MR had first turned to smoking as a coping mechanism to navigate the challenging contours of his early adulthood, a coping mechanism that had unexpectedly transformed into a persistent and debilitating addiction. Despite enduring numerous attempts to break free from this deeply entrenched habit, MR found himself perpetually ensnared within a disheartening cycle, one that not only intensified his distress but also perpetuated a sense of profound isolation. Based on the diagnostic framework outlined in the DSM-5, MR was clinically diagnosed with Tobacco Use Disorder, with a particular emphasis on the intricate interplay between the physical and psychological dimensions of nicotine dependence. Central to the formulation of this case was an in-depth analysis of the negative core beliefs and automatic thoughts that perpetuated MR's reliance on smoking as a crutch. The treatment protocol devised for MR seamlessly integrated various evidence-based modalities, including motivational interviewing, cognitive-behavioural therapy, assertiveness training, and comprehensive relapse prevention strategies. In the short term, the therapeutic focus revolved around imparting essential psycho-education to MR and meticulously identifying the triggers that fuelled his dependence. Simultaneously, the long-term objectives centred on fostering a deep-seated commitment to pharmacological adherence and, ultimately, achieving a successful cessation of tobacco consumption. Emphasizing the critical importance of cultural sensitivity and ethical considerations, this report underscores the indispensable need for a holistic, clinet centred approach to smoking cessation. By shedding light on the intricate challenges encountered by individuals ensnared within the clutches of nicotine addiction, this report advocates for a nuanced and empathetic framework that acknowledges the complex interplay between personal narratives and the physiological mechanisms underpinning addiction.

Keywords: Tobacco Cessation, Nicotine Dependence, Cognitive-Behavioural Therapy, Motivational Interviewing, Dsm-5

1. Introduction

MG is a 56-year-old male with an upper-middle-class socio-economic status. He is happily married and has five children, holding the role of the eldest among his siblings. Professionally, MG is a businessman, contributing to the family's financial stability. His family structure is nuclear, suggesting that he lives with his immediate family members, emphasizing the importance of this close-knit unit in his life.

1.1. Presenting Complaints

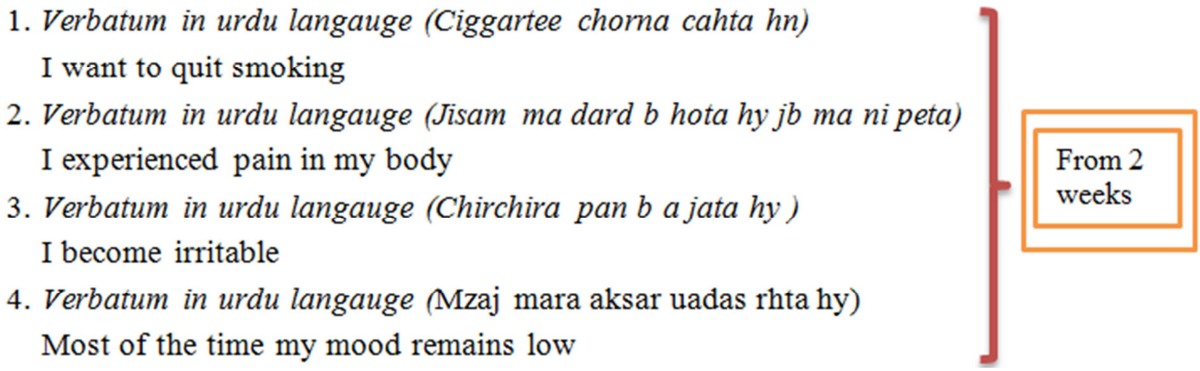

Figure 1. *Presenting complinat of patient.*

1.2. History of Presenting Problem

The client started smoking cigarette at the age of 18 years in the year 1984. His family environment was such that the parents couldn't pay attention to their children's individual needs. The parents had no fix source for earning hence they would be out for most part of the day, father went farming and used to sell wood or work with some other landlords while mother would take her kettle out. The client went to search for work while he was 16 and there he met an elderly man in the main market who offered him to work with him. The client started working with him and in return the owner would give him monthly groceries for his family and some money at times. Then after few years the owner had to shift his business to city and he asked the client if he would want to go with him. The client told his parents who refused because they were scared of sending their child far from home that too in a totally new city.

But client really wanted to go and so he did without informing his family. He reached Islamabad and had no contact from any family member. He reports that it was a very tough time of his life because he knew he had to work and had no way back. It's then when he started smoking cigarette while a colleague offered him and said you seem sad and depressed this is the only way you can relief this feeling. Initially he would smoke one cigarette in a day or three four a week because he didn't have much money to buy it. He reports that he wouldn't say he was addicted to it he had it maximum thrice a day. Then after he met his cousin in same city and reunited with his family he said he didn't smoke much. He didn't report a specific number of cigarettes but roughly reported it to be once in daily. Then later during the time of his first marriage ending he began smoking a lot. His second wife never had problem with it. He finished a complete box of cigarette in a day. And since then there has been no going back to trying to reduce it. He feels depressed and experiences low mood when he thinks of his past life. He feels irritated on trivial matters at times. All of these feelings makes him want to smoke cigarette and then it becomes a vicious cycle because nicotine in tobacco is both a depressant and a stimulant so once you have it you feel better but it again makes you feel depressed.

He feels the need to cut down the use of tobacco and is trying to do so but he says he has never been successful in doing so. He also feels that because of this addiction of his friends and family members prefer to avoid him to minimize the risk associated with passive smoking. He also says that he feels very irritated when people come up with discussion on how harmful it is because they don't understand that it isn't in his control hence he always ends up in having arguments [1].

He does not socialize much because of this reason and tried to avoid gatherings or attending events. He also reported somatic complaints of headache nausea and heartburn associated with tobacco use.

2. Detail History

2.1. Personal History

The client was born through spontaneous vaginal delivery at home. He had good health and achieved all age appropriate milestones on time. There was no history of any major physical illness during childhood years. He reported his childhood to be tough because being the eldest he had to help his parents with everything and the shared their responsibilities while take caring of his younger siblings too.

2.2. Family History

The client belongs to upper middle class family. He lives in a nuclear family system. He has his business of property dealing [2]. His wife is a working women and works as a chartered accountant in her own private firm. He has two sons from this wife who he currently lives with. This is his and his wife's second marriage. His wives son from her first marriage lives with them too. He has good relation with his wife but she is a bit too dominating and he can't do anything against her will.

He has a good relationship with his children but he says that he doesn't get to spend much quality time together owing to his and their busy schedules. They rarely ever sit together for meals and he says this is something he wishes he could change. The client had divorce his first wife 22 years

back and has two sons from first marriage. His first wife was his first cousin. The marriage lasted for 17 years. He has three brothers and one sister. His father has passed away and mother is alive. His mother lives with his younger brother. He tries to financially support his brothers when he can because they aren't financially sound but his wife is not very supportive of this so he has to do this without her knowing. Both his sons from his first marriage live on their own independently they are both working and earn well for themselves.

2.3. Educational History

Client started schooling at the age of 6 from a government school in Kashmir. He continued his studies in government schools throughout till the grade 8. He had good relationship with teachers and fellow students and was an obedient student. He was a competent student, and always got good grades. He liked studying and reading but he was not able to continue his study further after grade 8 because his family didn't send him to college since they couldn't afford to pay the fees.

2.4. Occupational History

The client started working at the age of 16 on a shop in village and later went to city to work with the same shop owner. 5 years after that he got a grass root job in a government organization through his cousin who he met in the same city. He worked there for 15 years and earned well. After that he began working with a property dealer and gradually started working individually and runs his own business now [3].

2.5. Sexual History/ Marital History

The client gained puberty at the age of 13years. He got the knowledge about pubertal changes and all through his friends. He was married to his cousin at the age of 24 years. He had a good intimate relationship with his wife. This marriage lasted for 17 years after which he divorced his wife. Reason being his second marriage. He met his second wife at his work place and fell in love with her. He married her and hid this news from his family. But a family member got to know about his second marriage and broke the news to his first wife. His first wife's brothers couldn't stand his second marriage and told there sister to get a divorced.

It has been 25 years of his second marriage now and he has two sons from his second wife. He has good relationship with his wife.

2.6. Medical/ Psychiatric History

There is no history of psychiatric illness in client's family. As for the medical history the client's father had hypertension. The client has hypertension and high cholesterol levels for which he is on medication. Along with that he also has gastroenterological problems frequently and takes regular medicines for that.

2.7. Premorbid Personality

The client had extrovert personality as reported. The client's attitude towards other was reported to be helping, friendly and caring. No aggressiveness or unusual sadness or crying spells were reported. The client had adequate self-caring behavior. However, lack of self-confidence and worthlessness was reported throughout his childhood. The client had complaining behavior and would complain majorly about not being able to continue education like other children of the family. Poor stress coping was also reported.

3. Assessment

The client was assessed both at informal and formal level.

1. Informal Assessment included clinical interview and MSE.
2. Formal Assessment included Fagerstrom Test for Nicotine Dependence (FTND)

3.1. Informal Assessment

3.1.1. Clinical Interview

Clinical interview was conducted to get the detailed information about client's background information and history. The client was asked his problems associated with tobacco use and what his expectations were from the treatment. Client had a fair insight about his problems and was motivated to work on ways to improve them.

3.1.2. Mental Status Examination

The client was in middle 50's she had an average stature and appeared to be slightly overweight. His clothing was neat and appropriate. His grooming was normal but nails were not trimmed appropriately and his teeth enamel was stained. His hygiene apparently was neat but he had cigarette smell. He had a bit rigid posture. Client appeared to be restless. His attention and concentration span was short and he would get distracted easily. His judgment of time place situation and person was appropriate. His memory was intact and normal. The eye contact transitioned from normal to avoiding when she would recall his past life. His facial expressions were responsive and sad. He was cooperative during the session. He had an appropriate affect and euthymic to depressive mood. His speech was normal and thought content was congruent [4]. Client did not have any preoccupations or hallucinations. He had normal organization. His intelligence, judgment and abstraction were normal. His decision making was confused. He was exhausted and overwhelmed by his life generally. He did not have a very good social support [5].

3.2. Formal Assessment

1. Fagerstrom Test for Nicotine Dependence (FTND)

The Fagerstrom Test for Nicotine Dependence [3] is a standard instrument for assessing the intensity of physical addiction to nicotine. It provides a measure of nicotine dependence related to cigarette smoking. It contains six items

that evaluate the quantity of cigarette consumption, the compulsion to use, and dependence. It indicates the intensity of client's physical dependence on nicotine. It was used to help plan a treatment plan according to client's current level of dependence. The test questions were asked in form of interview and it took 5-10 minutes. Clear instructions were provided prior starting the test.

4. Results

Raw Score: 7 Severity level: High

4.1. Qualitative analysis

The FDNT was administered to know the severity level of dependence on nicotine. Client's score on FDNT is 7, that falls in the maximum category of range. The score suggests that the client has high level of dependence. Client's score suggest his presenting complaints of irritability, low mood and the somatic complaints. Client's background information is also supporting the test results.

4.2. Diagnostic Formulation

According to DSM-5 TR the most suitable provisional diagnosis is of Tobacco Use Disorder.

3.01 (F17.200) Tobacco Use Disorder [4]

4.3. Differential Diagnosis

Poly-substance use disorder

Patients using tobacco are at risk for other substance use disorders. More than three class of drug and craving for drug. Here the patient is only use nicotine [6].

4.4. Mental Disorder

The patient have some somatic complaint and low mood but haven't full fill the criteria of depression and anxiety fully.

Case Formulation (4Ps)

Table 1. *P factors according to psychosocial model.*

P Characteristics	Biological	Psychological	Social
Predisposing	The reinforcing pharmacological effects of nicotine	Neglecting home environment. Marital issues	Lack of social support Financial problem
Precipitating	Dependency on drug Poor nutrition, addiction of drug	Leaving his home Lack of moral emotional support system (Divorce)	Having no contact with family
Perpetuating	He is patient of hypertension poor stress coping, best escape to depend of nicotine	Constant struggle Disturbed family dynamic	Lack of family support. No social gathering or friendship
Protective	Good adherence of drug. Proper visits to concern physician	Good insight of the problem Motivated to change	Family support for change

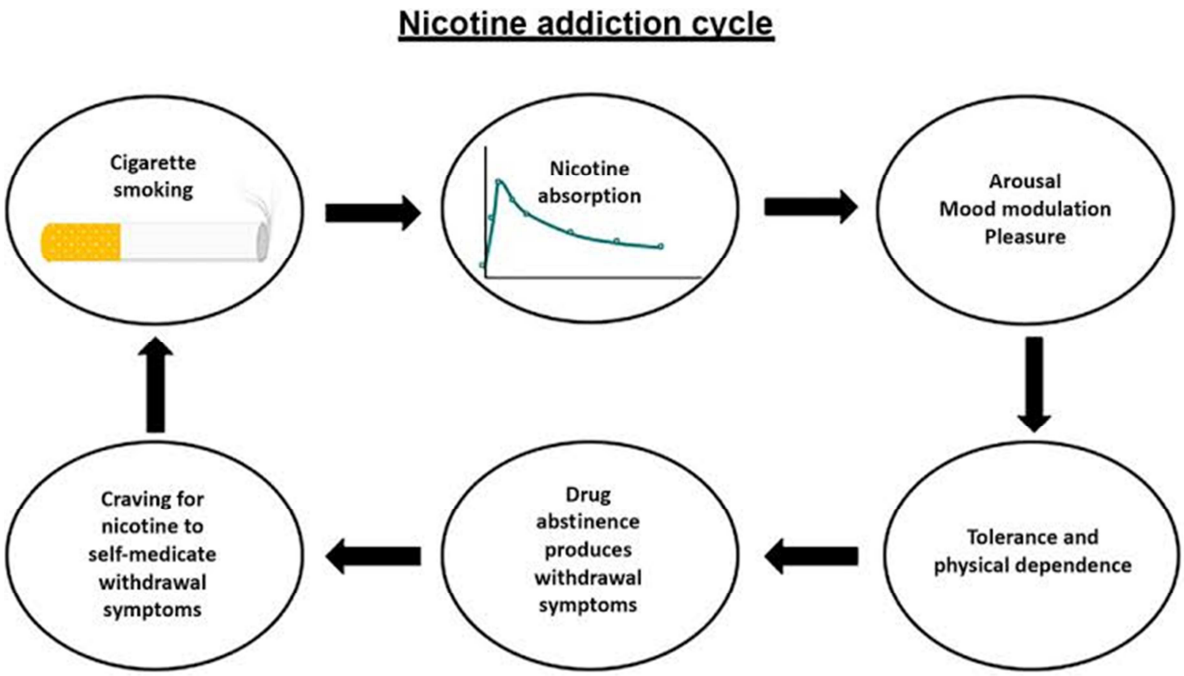

Figure 2. *Nicotine addiction cycle for smoking.*

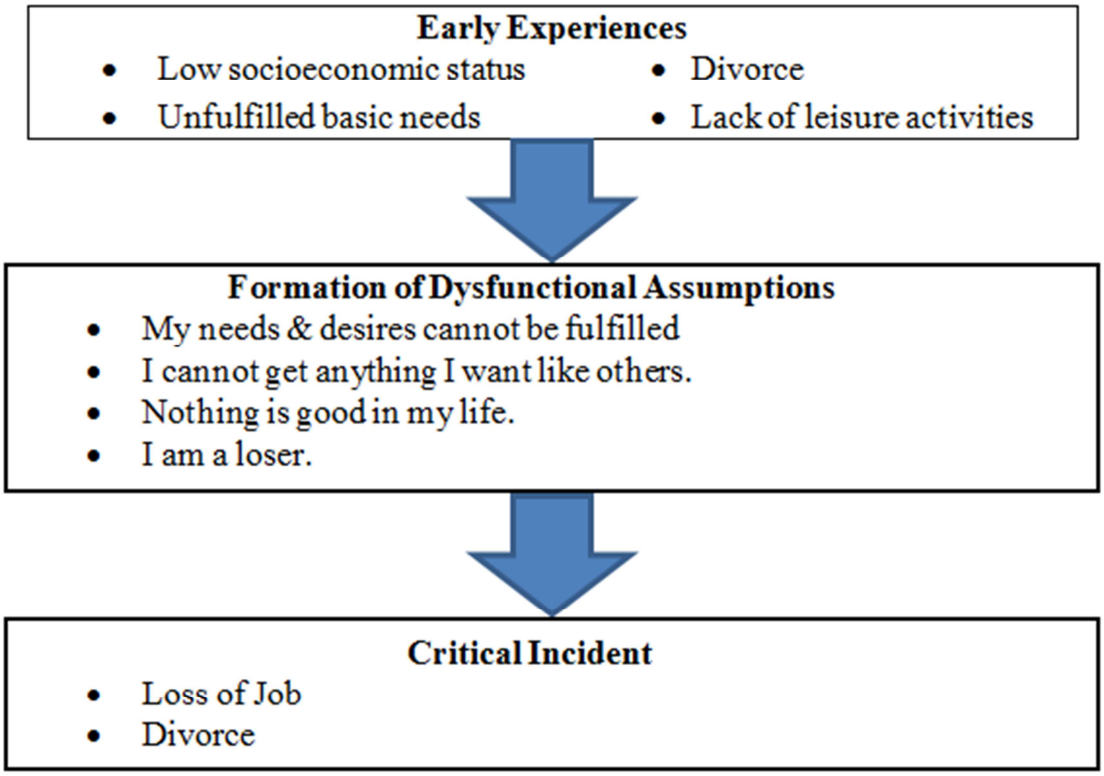

Figure 3. *Early historical aspect.*

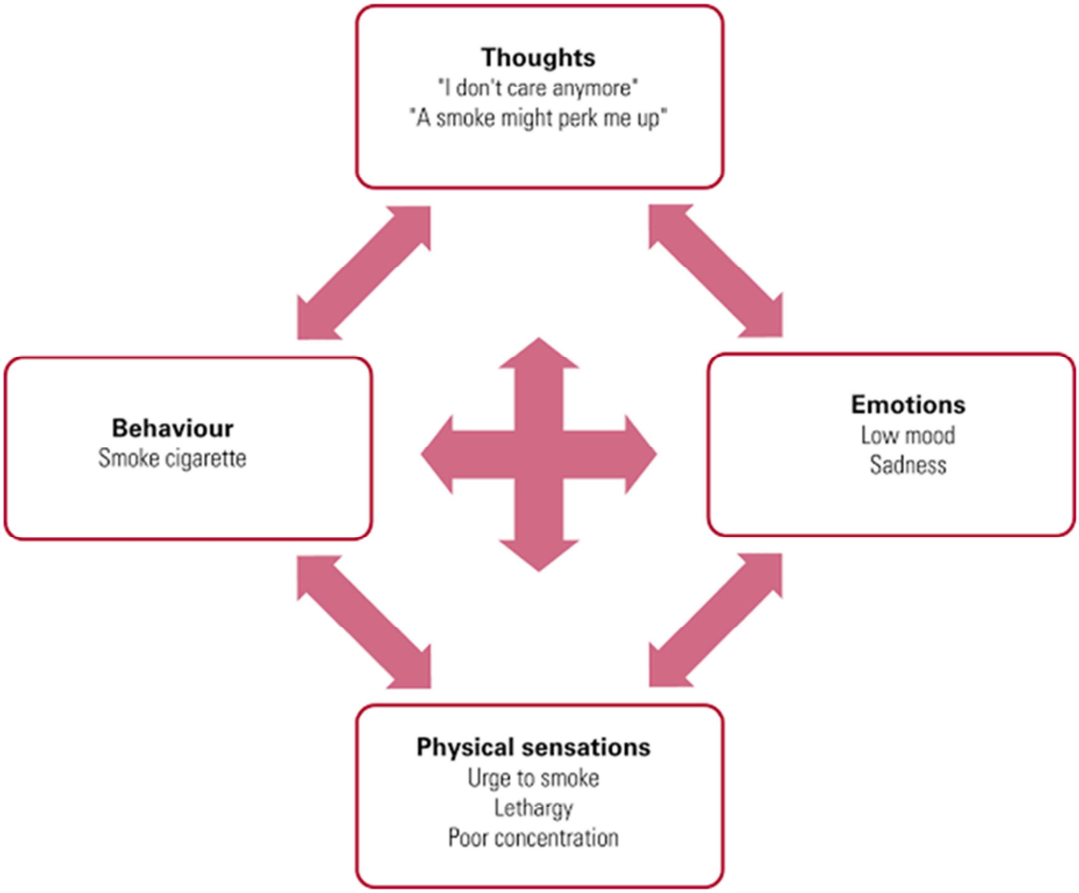

Figure 4. *Beck model.*

According to DSM 5 diagnosis of Tobacco use disorder is a problematic pattern of tobacco use leading to clinically significant impairment or distress, as manifested by at least two of the mentioned symptoms occurring within a 12-month period which include tobacco often taken in larger amounts or over a longer period than was intended, a is a persistent desire or unsuccessful efforts to cut down or control tobacco use, a great deal of time is spent in activities necessary to obtain or use tobacco. Craving, or a strong desire or urge to use tobacco [7]. Recurrent tobacco use resulting in a failure to fulfill major role obligations at work, school, or home. Continued tobacco use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of tobacco (e.g., arguments with others about tobacco use). Important social, occupational, or recreational activities are given up or reduced because of tobacco use. Recurrent tobacco use in situations in which it is physically hazardous (e.g., smoking in bed). Tobacco use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by tobacco. Tolerance and withdrawal.

4.5. Case Conceptualization

This case better explain by nicotine addiction cycle.

After smoking the first cigarette of the day, the client experiences marked pharmacology effects, particularly arousal. No other cigarette throughout the day produces the same degree of pleasure or arousal. For this reason, many smokers describe the first cigarette as the most important one of the day. Shortly after the initial cigarette, tolerance begins to develop. Accordingly, the threshold levels for both pleasure/arousal and abstinence rise progressively throughout the day as the client becomes tolerant to the effects of nicotine [8].

With continued smoking, nicotine accumulates, leading to an even greater degree of tolerance. As a result, the client experiences greater withdrawal symptoms between successive cigarettes. Late in the day, each individual cigarette produces only limited pleasure/arousal; instead, smoking primarily alleviates nicotine withdrawal symptoms.

Cessation of smoking overnight allows desensitization, or a loss of tolerance, to drug responses. Most dependent smokers tend to smoke a certain number of cigarettes per day -- usually more than 10 -- and tend to consume 10–40 mg of nicotine per day to achieve the desired effects of cigarette smoking and minimize the symptoms of nicotine withdrawal [9]. According to the CBT model of depression proposed by Aaron T. Beck, this model also helpful in understanding in this case person susceptible to depression develop inaccurate/unhelpful core beliefs about themselves, others, and the world as a result of their learning histories. These beliefs can be dormant for extended periods of time and are activated by life events that carry specific meaning for that person. Core beliefs that render someone susceptible to depression are broadly categorized into beliefs about being unlovable, worthless, helpless, and incompetent. These beliefs lead to assumptions and negative automatic thoughts. Automatic thoughts are an individual's immediate, spontaneous appraisals of a given situation. They shape and elicit a person's emotional and behavioral responses to that situation. Since they are automatic, they are rarely questioned. Even when they are predominantly negative, the individual accepts them as true and can be overwhelmed by constant questions and images that hurt one's self-esteem [10]. In the present case, the client had early negative experiences unfulfilled basic needs due to which the client would compare himself to other individuals of his age around him. These experiences lead him to assume certain statements about himself and the world around him that made certain core beliefs in him. The continuity of these situations along with the similar stimuli strengthened his core beliefs. Occurrence of a new situation later in life lead to the activation of those assumptions made earlier i e. "My needs & desires cannot be fulfilled, I cannot get anything I want like others, nothing is good in my life, and I am a loser". This caused distress and activation of negative automatic thoughts. The client focused on these negative thoughts all the time which modified his lens through which he is seeing the world and accept those as a part of reality.

This automatic negative thought lead to negative emotion like depression and anxiety. And these lead to nicotine addictive behavior.

Intervention and Treatment Plan

With the help of client and his expectations smart short and long term goals were designed to streamline the treatment plan and work on achieving those

Short Term Goals

1. Psycho-education: the client will be psycho-educated regarding the treatment nature and the role of client and therapist in treating this condition.
2. Noting down triggers that lead to the urge of wanting to smoke cigarette
3. Trying to figure out how the trigger can be avoided
4. Implementing the above mentioned way at least once a day
5. Discussing medical treatment options with physician
6. Setting a quit date
7. Relaxation technique if he feels anxious (Deep breathing & Progressive muscle relaxation)

Long Term Goals

1. Pharmacological Treatment Adherence
2. Quitting tobacco use gradually
3. Follow up sessions
4. Relapse prevention

Therapeutic Treatment Strategies to achieve the goal

Motivational Interviewing

Motivational interviewing was used to help the client analyze the reasons why he might be hesitant to quit smoking and to come up with solutions to make him feel more eager and capable of doing so. The client was made mindful and

aware of his abilities to work on this problem. The client was encouraged and given the confidence that was needed to implement on the strategies.

4.6. Cognitive Behavioral Therapy

Client was made to focus on thoughts that lead to and influence the smoking behavior. He was made to write down these thoughts using journaling. This was done to make him aware of what leads him to smoking. This cycle of thoughts emotions leading the behavior of smoking was to be changed by rationally analyzing the thoughts and controlling how the client felt about them. He was made to interrupt the negative thought pattern and replace it with a positive one. Along with that he was taught healthier ways of coping with stress if he ever feels such as increased physical activity, mindfulness, and journaling and relaxation techniques [11].

Behavioral strategies involved not going to shops or markets initially where he usually went to get cigarettes. Reinforcing his cessation with something that he finds rewarding other than smoking. Escaping the environment that triggers him to smoke and delaying the moment where he has strong urge or craving for cigarette.

4.7. Assertiveness Training

This strategy was used with the client to educate him how to say "No" to anyone who offered him a cigarette or interfered with his therapy. First, three styles of communication were addressed with the client, namely passive, assertive, and aggressive, and he was asked to rule out his current communication style as well as the best style that he wanted to pursue. The assertive option was chosen by the client. After that, a scenario was created based on the client's recent happenings, and he was assertively communicated by modeling. Finally, the client was given a predicament and asked to reply assertively through role playing. Feedback was given right away.

4.8. Relapse Prevention-Road Map Technique

The client was made to look for what might have led him to having a relapse if he ever had one previously. Once he had a clear picture of the events that could lead to relapse he was motivated to avoid those triggers. The client was made to figure out for himself what is it that will help him stay away from having a relapse. By the end of this the client was well aware of his problem and knew what he had to do to prevent relapse [12].

Along with that road map technique was employed with the client to ensure relapse prevention. A road map with two options was given to the client. One was where his client's life while on tobacco smoking was manifested while the alternative was a drug-free path. The client was made to gauge the pros and cons of both, and choose his own path. The client picked a course that did not involve tobacco smoking, according to the client it was the path that would lead to a good future for him. The result of this was that the strategy worked well, and the client was able to tell the difference. He had a choice between two routes, and he chose the best one for him.

5. Discussion

MG, a 56-year-old man from an upper-middle-class background, presented with a strong desire to quit smoking and several associated complaints. He had been a smoker since the age of 18, initially taking up the habit as a means of coping with a challenging family and work situation. Throughout his life, he struggled with the addiction, often consuming a pack of cigarettes daily, which exacerbated his irritability, low mood, and somatic complaints.

MG's upbringing was marked by a difficult family environment, where both parents were often absent due to work, leaving him to fend for himself. He ventured to a new city at a young age for better opportunities, leading to his initial exposure to smoking [13]. Over the years, his smoking escalated, especially during the tumultuous period of his first marriage ending.

His second marriage brought temporary relief from smoking restrictions, but he soon found himself trapped in a vicious cycle of nicotine addiction. MG's struggles with tobacco use had taken a toll on his mental and physical health, causing him distress, irritability, and social isolation. He was well aware of the harmful effects of smoking, but his addiction persisted.

MG's personal history revealed his resilience and commitment to supporting his family despite limited educational opportunities. He had a nuclear family, including his second wife and her son from a previous marriage, as well as two sons from his first marriage who were living independently [14].

Formal assessments, including the Fagerstrom Test for Nicotine Dependence (FTND), confirmed his high level of nicotine dependence. The diagnosis of Tobacco Use Disorder was made according to DSM-5 criteria, highlighting both the physical and psychological aspects of his dependence.

MG's case was conceptualized as a cycle of nicotine addiction, intertwined with underlying negative core beliefs stemming from his challenging upbringing. These beliefs contributed to his continuous smoking behavior as a way to cope with feelings of worthlessness and depression.

To address his condition, a treatment plan was formulated with short-term goals, including psycho-education, trigger identification, discussions with a physician about medical treatment options, and setting a quit date. Long-term goals focused on pharmacological treatment adherence, gradual tobacco cessation, and relapse prevention.

Therapeutic strategies, such as motivational interviewing, cognitive-behavioral therapy, assertiveness training, and relapse prevention techniques, were employed to support MG in his journey to quit smoking. These strategies aimed to empower him to overcome his addiction and develop healthier coping mechanisms [15].

By providing MG with the tools and support needed to combat his nicotine dependence, this case report underscores

the significance of a comprehensive, client-centered approach in addressing the challenges faced by individuals struggling with addiction.

No conflicts of interest

CONSENT FORM

Patient Consent Form for Publication in a Medical Journal

I, **Mr MG**, understand that I am being asked to consent to the publication of my case in a medical journal. I have been informed that the purpose of the publication is to share my case with other medical professionals so that they can learn from it. I have also been informed that my name and other identifying information will be removed from the publication to protect my privacy.

I understand the following:

1. The Information will be published without my name and every attempt will be made to ensure anonymity.
2. The Information will be placed on a website.
3. I can withdraw my consent at any time before online publication, but once the Information has been committed to publication it will not be possible to withdraw the consent.
4. I agree to the publication of my case and I give my consent to Muddsar Hameed to publish my case in a medical journal.

I have had the opportunity to ask questions about this publication and I have received satisfactory answers.

Patient Name initials : MG

Signature of Patient

Signature of requesting health care worker:

Figure 5. *Informed consent form.*

ORCID

Muddsar Hameed: https://orcid.org/0009-0006-6767-639X\

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