



Migraine – Related stigma and its relationship to disability, and quality of life

შაკიკთან დაკავშირებული სტიგმა და მისი კავშირი შეზღუდულ შესაძლებლობასთან და ცხოვრების ხარისხთან

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Abstract

Introduction: Migraine is a common and disabling neurological condition that significantly impacts physical, emotional, and social well-being. Misconceptions, such as viewing migraines as minor headaches or signs of weakness, contribute to stigma, leading to misdiagnosis, inadequate treatment, and poor quality of life. This research explores the stigma surrounding migraines and its effects on disability, quality of life, and treatment access. **Methodology:** A comprehensive literature review was conducted, analyzing peer-reviewed studies on the prevalence and forms of migraine-related stigma, its impact on individuals' lives, and existing strategies to reduce stigma. Special attention was given to treatment gaps and challenges in under-resourced settings. **Results:** Migraine-related stigma significantly reduces quality of life, causing social withdrawal, low self-esteem, anxiety, and depression. Many individuals struggle with workplace productivity and hesitate to disclose their condition due to fear of judgment. Although advancements in treatment exist, access remains limited in underserved populations, further exacerbating the stigma and burden. **Conclusion:** Reducing migraine-related stigma requires public awareness, workplace support, and improved access to care. By addressing misconceptions and fostering a supportive environment, the overall well-being and treatment outcomes for individuals living with migraines can be significantly enhanced

Keywords: Stigma, Disability, Quality of life, Misconceptions, Treatment gaps, Migraine

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აბსტრაქტი

შესავალი: შაკიკი ნევროლოგიური მდგომარეობა, რომელიც მნიშვნელოვან გავლენას ახდენს ფიზიკურ, ემოციურ და სოციალურ კეთილდღეობაზე. მცდარი წარმოდგენები, რომგორიცაა შაკიკი წარმოადგენსუმნიშვნელო თავის ტკივილის ან სისუსტის ეპიზოდებს,, ხელს უწყობს სტიგმას, რაც იწვევს არასწორ დიაგნოზს, არაადეკვატურ მკურნალობას და ცხოვრების ცუდ ხარისხს. მიმოხილვის მიზანია შაკიკის გავლენა შეზღუდულ შესაძლებლობაზე, ცხოვრების ხარისხზე და მკურნალობის ხელმისაწვდომობაზე. **მეთოდოლოგია:** ჩატარდა ლიტერატურის ყოვლისმომცველი მიმოხილვა, რომელშიც გაანალიზდა რეცენზირებული კვლევები შაკიკთან დაკავშირებული სტიგმის გავრცელებისა და

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ფორმების შესახებ, მისი გავლენა პაციენტების ცხოვრებაზე და სტიგმის შემცირების არსებული სტრატეგიები. განსაკუთრებული ყურადღება დაეთმო მკურნალობის ხარვეზებსა და გამოწვევებს შეზღუდული რესურსების პირობებში. **შედეგები:** შაკიკთან დაკავშირებული სტიგმა მნიშვნელოვნად ამცირებს ცხოვრების ხარისხს, რაც იწვევს დაბალ თვითშეფასებას, შფოთვას და დეპრესიას. ბევრი პაციენტი ყოყმანობს გაამჟღავნოს თავისი მდგომარეობა. მიუხედავად იმისა, რომ გვაქვს მიღწევები მკურნალობაში, ხელმისაწვდომობა შეზღუდულია გარკვეულ პოპულაციებში, რაც კიდევ უფრო ამძაფრებს სტიგმას და დაავადების ტვირთს. **დასკვნა:** შაკიკთან დაკავშირებული სტიგმის შემცირება მოითხოვს საზოგადოების ინფორმირებულობას, სამუშაო ადგილზე მხარდაჭერას და ზრუნვაზე ხელმისაწვდომობის გაუმჯობესებას. მცდარი წარმოდგენების მოგვარებით და დამხმარე გარემოს ხელშეწყობით, შაკიკით დაავადებული ადამიანების საერთო კეთილდღეობა და მკურნალობის შედეგები შეიძლება მნიშვნელოვნად გაუმჯობესდეს.

საკვანძო სიტყვები: შაკიკი, სტიგმა, შეზღუდული შესაძლებლობა, ცხოვრების ხარისხი, მკურნალობის ხარვეზები.

ციტატა: მადჰავან ა. შაკიკთან დაკავშირებული სტიგმა და მისი კავშირი შეზღუდულ შესაძლებლობასთან და ცხოვრების ხარისხთან. ჯანდაცვის პოლიტიკა, ეკონომიკა და სოციოლოგია. ჯანდაცვის პოლიტიკა, ეკონომიკა და სოციოლოგია, 2025; 9 (1). <https://doi.org/10.52340/healthecosoc.2025.09.01.04>.

Introduction

Migraine is a common, complex, and persistent neurological condition that ranks as the second most common cause of years spent disabled worldwide. It significantly impairs a person's ability to perform daily duties and has an effect both during and between bouts. People who suffer from migraines often face challenges like less participation in family activities, tense social relationships, and decreased productivity at work.

This research is significant because it analyses the emotional and functional challenges faced by migraine sufferers. They often refuse seeking health care and reduce their workplace exposure which leads to disability and continuous withdrawal from functioning. Research on this will make an opportunity to expand treatment approaches and various programs through which the individuals can overcome this kind of stigma and stress. (Shapiro, 2024)

That study involving nearly 60,000 individuals with migraines, found that over 30% frequently experience migraine-related stigma. After adjusting for sociodemographics, clinical characteristics, and monthly headache days, the study demonstrated that higher levels of stigma were linked to increased disability, greater interictal burden, and reduced quality of life, regardless of headache frequency. These findings highlight the urgent need for scientific, clinical, and public health initiatives to understand and mitigate migraine stigma. Exploring the mechanisms connecting stigma to health outcomes could lead to interventions that reduce the burden of migraines across all levels of headache frequency.

Despite of significant advance in Migraine related stigma research for last decades, still there are some aspects which are either not properly elaborated or remain controversial. This research aims to enhance the understanding of migraine-related stigma and its relationship to disability, Interictal burden and Quality of life by facilitating knowledge sharing, comparing various theoretical frameworks, and providing a solid foundation for evidence-based analysis. It seeks to offer a deeper insight into this emerging health issue and inform strategies for addressing its impact on affected individuals.

Methodology

A literature search was conducted using PubMed, American Migraine Foundation and Web of Science databases. Data were extracted based on predefined inclusion criteria. key phrases, includes “migraine,” “stigma,” “disability,” “quality of life,” “misconceptions,” and “treatment gaps.” The search was limited to peer-reviewed articles and reviews published in English between September 2011 and September 2024 to ensure the inclusion of recent and relevant studies.

Literature review

Demographic Insights of Migraine

Migraines are most common among individuals aged 15 to 49, with prevalence peaking during their 30s. Women are significantly more affected than men, experiencing migraines at rates 2 to 3 times higher, likely due to hormonal influences.

Migraines are more prevalent in low- and middle-income countries, where limited access to healthcare often results in untreated or poorly managed cases, leading to greater disability. Individuals with lower socioeconomic status are disproportionately affected due to barriers in receiving adequate treatment.

Additionally, while higher migraine prevalence rates are reported in the America and Europe compared to Africa and Southeast Asia, underdiagnosis remains a significant issue in resource-limited regions, further complicating the accurate assessment and management of this condition.

Migraines contribute significantly to disability-adjusted life years (DALYs) lost due to neurological disorders. They are closely linked to various comorbid conditions, including depression, anxiety, cardiovascular diseases, and sleep disturbances, which further exacerbate their impact on overall health and well-being.

In the United States, migraines impose an economic burden of over \$23 billion annually, primarily due to lost productivity and healthcare expenses. Chronic migraines, which affect approximately 1–2% of the population, place a disproportionate strain on healthcare systems, requiring more intensive management and resources compared to episodic migraines. (Parikhet.al, 2021)

Contributing Factors of Migraine

Age-related Factors:

- In children and adolescents, migraines are often linked to family history and hormonal changes, particularly after puberty in girls.
- In adults, migraines tend to fluctuate with hormonal changes, stress, and lifestyle factors. Women, in particular, may experience an increase in migraines related to menstruation, pregnancy, and menopause.
- Older adults often see a reduction in migraines, possibly due to hormonal stabilization or changes in brain function.

Sex-related Factors:

- Women are twice as likely to experience migraines as men, largely due to hormonal fluctuations in estrogen, which can both trigger and alleviate migraines.
- Men, though less likely to experience migraines, tend to suffer from more severe episodes, often linked to stress or physical activity triggers.

Common triggers include: Stress, lack of sleep, certain foods, dehydration, hormonal shifts, and environmental factors like bright lights or strong smells are common triggers for migraines. (Colleen Doherty, 2024)

The Impact of Stigma on Migraine

Living with migraines often involves dealing with widespread misconceptions and a lack of awareness, which perpetuates stigma. Stigma refers to negative, dismissive attitudes directed toward individuals with a specific medical condition. For people with migraines, this stigma frequently manifests as judgment or misunderstanding when their symptoms prevent them from meeting social, educational, or professional obligations. Such attitudes can leave those with migraines feeling invalidated or disheartened, sometimes even leading them to question the legitimacy of their own experiences or worry they may be overreacting to their symptoms.

The study titled "The Unique Role of Stigma in Migraine-Related Disability and Quality of Life" surveyed over 59,000 people living with migraines and found that about one-third experienced migraine-related stigma frequently. The research focused on two types of stigma:

internalized stigma, where individuals internalize negative stereotypes about themselves due to their migraines, and might manifest as thoughts like, "I'm not a good employee or parent because of my migraine."

enacted stigma, which involves facing discrimination or refers to direct negative reactions from others.

These two forms of stigma are interconnected, often creating a harmful cycle: a migraine disrupts daily activities, leading to more enacted stigma, which over time can become internalized, further escalating stress and anxiety. This increased psychological distress, which is itself a common migraine trigger, can worsen both the frequency and severity of attacks, perpetuating the stigma cycle.

Stigma likely contributes to a decline in the quality of care received by individuals with migraines. Many migraine sufferers report negative and stigmatizing experiences with healthcare professionals, which can lead to "treatment carryover" a situation where patients avoid seeking care to prevent additional negative interactions. Research has shown that this phenomenon is particularly pronounced in individuals with migraine and comorbid psychiatric conditions, as they may be less likely to seek psychiatric support. In fact, individuals with migraines and higher psychiatric symptoms report greater social stigma compared to those with fewer symptoms.

This fear of stigma can lead patients to suppress concerns, particularly those related to mental health, and avoid necessary treatment. Similar issues may affect the migraine population overall, as revealed by the Migraine Knowledge, Attitude, and Practice Patterns (MKAPP) Survey. The survey found that nearly a third of neurologists did not agree with the statement that migraine is a legitimate brain disease, reflecting a broader lack of understanding that may exacerbate stigma and hinder proper treatment. (Seng, 2022)

Phases of Migraine

A migraine attack unfolds in distinct phases, each with unique characteristics. Recognizing these stages is essential for managing and minimizing symptoms:

I. Ictal Phase:

1. Prodrome: This phase marks the onset of a migraine, which can begin several hours or even days before the headache symptoms may include Irritability, depression, yawning, polyuria, food cravings, sensitivity to light or sound, problems in concentrating, fatigue and muscle stiffness, difficulty in speaking and reading, nausea and insomnia.

2. Aura: Experienced by about 20% of migraine sufferers, aura consists of visual disturbances like flashing lights or zigzag patterns, temporary loss of sight and numbness or tingling sensation in body parts. It lasts between 5 to 60 minutes and is fully reversible.

3. Headache: The primary phase, where severe headache pain lasts anywhere from several hours to up to three days. It is often accompanied by throbbing, drilling, ice pick in the head, burning, nausea, vomiting, giddiness, insomnia, nasal congestion, anxiety, depressed mood, sensitivity to light smell and sound, neck pain and stiffness.

4. Postdrome: Often referred to as the "migraine hangover," this final phase involves residual such as fatigue, difficulty concentrating, or mood changes, lasting up to a day or more after the headache subsides.

Being aware of these phases helps individuals take early action to treat and manage their migraine attacks more effectively.

II. Interictal Phase

The interictal phase of migraine refers to the period between attacks when individuals may continue to experience symptoms that affect their daily functioning.

These symptoms can include sensitivity to light and sound, cognitive difficulties, fatigue, and mood disturbances, including anxiety or depression, fear of upcoming events, worse interactions with family, friends and coworkers; anxiety perceptions, depressive symptoms, stigma, osmophobia, motion sickness, balance and vestibular dysfunction, changes in visual perception and hypersensitivity. For many individuals, this phase can be as disabling as the migraine itself, particularly in cases of chronic migraines.

During this, individuals may also experience heightened psychological distress, contributing to a reduced quality of life. Addressing the interictal phase with preventive treatments, lifestyle adjustments, and coping strategies is essential for improving overall quality of life and reducing the severity of future migraine

attacks. This ongoing support helps alleviate both the physical and emotional burdens associated with migraines, allowing for better management of the condition.

Emotional and Psychological Co-morbidities

While significant research has focused on the symptoms of migraines, other less visible aspects, such as stigma, are becoming increasingly recognized. This stigma, often tied to misconceptions about the disorder, exacerbates the emotional burden of migraine patients and can deter them from seeking treatment. Historically, migraines have been associated with traits like being “nervous” or “sensitive,” and even today, individuals with migraines are often portrayed in media as lazy, hypochondriacal, or unable to manage stress. Research using the Chronic Illness Stigma Scale found that chronic migraines were similarly stigmatized as epilepsy, while episodic migraines were less so but still correlated with the ability to work.

A survey of 9,999 people without migraines revealed that 31% believed migraine sufferers use their condition to avoid work or school, 45% thought it was easily treatable, and 36% saw it as a result of unhealthy behavior. These stigmatizing perceptions can make patients hesitant to seek a diagnosis or treatment, compounding their emotional strain. Many individuals with migraines feel their condition is not adequately recognized or managed, partly because it is often mistakenly attributed to psychological issues. This stigma does not just occur during migraine attacks but persists continuously, further contributing to the interictal burden (IIB).

Additionally, stigma is linked to higher risks of psychiatric comorbidities, particularly anxiety and depression, though the causal relationship remains unclear. Studies, such as a French survey, showed that both men and women with migraines had significantly higher levels of stress, anxiety, and depression compared to controls. Patients with migraines are two to four times more likely to develop depression over their lifetime compared to those without migraines. Research, including findings from the Women’s Health Study, has indicated that frequent headaches, including migraines, elevate the risk of developing depression, with increased headache frequency being associated with higher depression risk.

Genetic studies suggest that while migraine and major depressive disorder (MDD) are distinct conditions, they may share some neurobiological underpinnings, with migraine sometimes serving as either a symptom or consequence of MDD. Depressive symptoms often accompany migraine episodes, with anxiety frequently preceding attacks. Anxiety can further reduce quality of life as patients live in fear of the next episode. Neurophysiological studies support the connection between emotional stress and migraine, with findings indicating that emotional stress, mediated by the hypothalamus’s regulation of the limbic system, can trigger migraines. Imaging studies of migraine patients during the interictal phase show that emotional cues, especially negative ones, activate brain regions associated with both emotional processing and pain, such as the posterior cingulate, amygdala, and thalamus.

This complex interaction between stigma, mental health comorbidities, and neurological factors emphasizes the need for comprehensive treatment approaches that address not only the physical symptoms of migraines but also the psychological and social challenges they present. (American Migraine Foundation State of Union Recap 2024).

Disability and Burden

A study conducted by Dr. Fred Cohen in 2014 (Cohen, 2014) analyzed migraine prevalence and disability trends in the United States by reviewing data from epidemiologic surveys conducted over the past three decades. The findings summarize these studies and assess shifts in disease prevalence and associated disability patterns over time. A systematic review was conducted on U.S. examining the prevalence, disability, and overall burden of migraine, including both episodic migraine and chronic migraine. The primary tool for assessing migraine burden was the Migraine Disability Assessment Scale (MIDAS). Women consistently showed a higher proportion of MIDAS Grades III/IV compared to men. Migraine prevalence in the United States has remained relatively constant over the past 30 years, while migraine-related disability has shown an upward trend. This increase in disability may be attributed to various factors, including changes in reporting practices, research methodologies, societal attitudes, or shifts in factors that exacerbate or alleviate migraine symptoms, among other potential explanations. (Cohen et al, 2014).

Diagnostic Approach Considerations

Migraine is primarily diagnosed through clinical assessment. Diagnostic investigations are conducted for several reasons:

- To rule out other structural, metabolic, or headache-causing conditions that could mimic or coexist with migraine.
- To exclude comorbid conditions that could complicate both the headache and its treatment.
- To establish a baseline for treatment and identify any contraindications to medication.
- To monitor medication levels, assessing compliance, absorption, or overdose.

Disability assessment: Simple tools, such as the Migraine Disability Assessment Scale (MIDAS), can help quantify disability during the initial visit and can also be used for ongoing evaluations to track changes over time.

Family history: Around 70% of individuals with migraines have a first-degree relative who also experiences them. The risk is particularly higher, about four times greater, for those with a family history of migraine with aura. While migraine is believed to follow a multifactorial inheritance pattern, the exact genetic influences remain incompletely understood.

The selection of diagnostic tests is tailored to the individual's symptoms. For example, in older patients with symptoms like scalp tenderness, tests like erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) can help rule out conditions like temporal or giant cell arteritis. Visual field testing may be necessary for patients with persistent visual disturbances.

Researchers are exploring objective measures for headache severity, which could enhance migraine diagnosis and treatment evaluation. A study by Nguyen et al. demonstrated significant differences in the way patients with migraine perceive vibrotactile stimuli, including differences in stimulus amplitude discrimination and temporal order judgment, compared to control subjects. Additionally, blood tests have shown that high levels of calcitonin gene-related peptide (CGRP), a neurotransmitter linked to vasodilation, could help diagnose chronic migraine. Elevated CGRP levels, particularly in patients with a history of aura, were observed in one study, making it a potential biomarker for chronic migraine diagnosis. (Anderson et al, 2013)

Neuroimaging is generally not required for patients with a history of recurrent migraine headaches and a normal neurologic exam. CT scans of the head are typically used to rule out intracranial masses or hemorrhages in atypical or selected cases. However, a negative CT scan might miss certain conditions such as small subarachnoid hemorrhages, tumors, or strokes, particularly in the posterior fossa. Additionally, CT scans without contrast may not detect aneurysms. MRI and MRA are more effective for identifying aneurysms or arteriovenous malformations. (Pescosolido and Martin 2015)

Management of Migraine Stigma

Breaking the cycle of migraine-related stigma is challenging but possible through several methods. Cognitive interventions can help by guiding individuals to change their thought patterns or develop coping skills for living with a stigmatized condition. One approach is to build resilience, helping individuals reduce the impact of stigma in the future. Techniques like interpersonal therapy and self-advocacy education can be useful in this process. Additionally, the study emphasizes the value of having a strong community and support network for those living with migraines, as this connection can provide emotional support and reduce the isolation often felt due to stigma.

Migraine treatment is highly individualized, as the condition impacts people in various ways. There is no one-size-fits-all approach to managing migraines, and treatment often involves a combination of different therapies to alleviate symptoms. This multi-faceted approach can include medications, lifestyle changes, and therapies aimed at reducing the frequency and severity of attacks.

Migraine treatment overview:

- Diagnose migraine
- Assess disability
- Patient education
- Individual management
- Stratified care

I. Acute treatment: aims to alleviate symptoms during a migraine attack, providing relief as the episode unfolds.

Non pharmacological therapy: In December 2013, the FDA approved the Cerena Transcranial Magnetic Stimulator (Cerena TMS), the first device designed to alleviate pain caused by migraines with aura in adults aged 18 and older. The device is used by holding it against the back of the head with both hands, then

activating it to release a magnetic pulse that targets the occipital cortex. The recommended usage is one treatment per day, with no more than one session within a 24-hour period.

The approval of the Cerenia TMS was based on a randomized trial involving 201 patients with moderate to severe migraines. In the study, 39% of those using the device were pain-free two hours after treatment, compared to only 22% in the control group, showing a therapeutic gain of 17%. At the 24-hour mark, nearly 34% of the patients treated with the device were pain-free, while just 10% of the control group reported similar relief. (Jeffrey S, 2013)

Pharmacological: Simple analgesics, whether used alone or in combination with other compounds, have been effective in relieving mild to moderately severe headaches, and sometimes even severe ones. Acute treatment is most beneficial when administered within 15 minutes of the onset of pain, especially when the pain is mild. Tristans and ergot alkaloids, Ditans (In October 2019, the FDA approved lasmiditan as a treatment for acute migraines, both with and without aura) , CGRP antagonists. (Lipton et.al,2016)

II. Preventive treatment: Focus shall be on reducing the frequency of migraine attacks.

Prophylactic therapy for migraines may be recommended in the following cases: If migraine frequency exceeds two attacks per month , If individual attacks last longer than 24 hours ,If migraines cause significant disruption to daily life, with considerable disability lasting three days or more ,If abortive treatments are ineffective or overused, If symptomatic medications are contraindicated or ineffective,For hemiplegic migraine, or for attacks that present a risk of permanent neurological damage

Current prophylactic treatments typically work through various mechanisms, such as: 5-HT₂ antagonism (e.g., methysergide)!Regulation of voltage-gated ion channels (e.g., calcium channel blockers),Modulation of central neurotransmitters (e.g., beta blockers, tricyclic antidepressants) Enhancing GABAergic inhibition (e.g., valproic acid, gabapentin)Prevention of acetylcholine release (e.g., botulinum toxin) CGRP inhibitors (e.g., atogepant, eptinezumab, erenumab, fremanezumab, galcanezumab)

Additional notable mechanisms include altering neuronal oxidative metabolism with riboflavin or reducing neuronal hyperexcitability with magnesium supplementation. The selection of a preventive medication depends on various patient factors and treatment goals. (American migraine foundation state of union recap 2024)

III. Behavioral therapy: can help lower the intensity and frequency of migraines while also addressing anxiety and stress-related thought patterns.

Behavioral therapy for migraine focuses on addressing both the physical and psychological triggers of migraine attacks, often in combination with medical treatments. Common therapies include:

1.Cognitive Behavioral Therapy (CBT): Helps patients change negative thoughts and behaviors related to migraines, particularly stress and anxiety.

2.Biofeedback: Teaches patients to control physiological responses, such as heart rate and muscle tension, to prevent migraines.

3.Relaxation Training: Uses techniques like progressive muscle relaxation to reduce stress and muscle tension.

4.Mindfulness and Meditation: Focus on the present moment to reduce stress and promote relaxation, which can lower migraine frequency.

5.Biofeedback-assisted Relaxation: Combines biofeedback with relaxation methods to manage stress and tension.

These therapies have been shown to reduce migraine frequency, intensity, and duration, with long-lasting benefits when combined with pharmacological treatments. They can significantly improve a patient's quality of life by helping manage migraine triggers. (American Migraine Foundation, The Journal of Headache and Pain, 2024)

IV. Lifestyle Adjustments: such as managing sleep, diet, and stress can effectively reduce both the occurrence and severity of migraines.

A study on exercise for migraine prevention, which involved 40-minute sessions three times a week for three months, found a mean reduction of 0.93 in migraine attacks during the final month of treatment.Mindfulness-based stress reduction and home meditation have been explored as approaches to alleviate pain and enhance health-related quality of life in individuals with chronic pain conditions. (Varkey et.al, 2011)

While these methods showed effectiveness for patients with chronic arthritis, they did not yield significant benefits for those suffering from chronic headaches or migraines, as well as fibromyalgia.

Discussion

This research underscores that migraines extend far beyond episodic pain, impacting multiple dimensions of a person's life. The stigma surrounding migraine stems from widespread misconceptions and a lack of understanding about the condition. Migraines are often dismissed as mere headaches, leading to underestimation of their severity and impact. People who are affected by this stigma face more emotional, psychological and social burdens.

In many times migraines are misunderstood as laziness, attention seeking and inability to handle stress which makes people feel alone or helpless.

Even medical professionals get affected by stigma and they under diagnose or misdiagnose the patients, they ignore their complaints as an exaggeration of a tiny headache which cause delays in adequate treatment.

Migraine affects may divert people from opening up about their pain and asking for help, even they choose not to go for the regular work which leads to non productivity and depression. Depression and anxiety are increased in rates in migraine sufferers which push them not to get proper care, cycle of disability and decreased quality of life. They often have low self esteem. Understanding various phases of migraine like prodrome, aura, headache, post drome and interictal phases can help healthcare professionals to plan individualised and more affective treatment strategies

One of the most important factors to disability is interictal period or the time period between the attacks of migraine. Patients at that period may have mood swings, high sensitivity and cognitive impairments that seriously affect the daily activities, time at workplace and personal gatherings. These periods are usually addressed by 'Migraine hangover'. Other than treating migraine as a chronic illness it should be treated to manage the interictal phase of the disease. According to various studies this phase is usually misunderstood and underdiagnosed. Planning treatment according to the phases can improve the whole outcome of migraine.

So many types of clinical examination tools are used to diagnose migraines like neuroimaging or biomarkers like CGRP levels are important for a best treatment plan for migraine and also tools like Migraine Disability Assessment Scale (MIDAS) are essential to decrease the disability and increase of productivity in migraine sufferers.

The treatment of migraine has been evolved by recent advancements such as preventive measures like CGRP inhibitors and lifestyle changes, and acute treatments like CGRP agonists and devices like Cerena TMS. Patient who suffers migraine regular, intense migraine should preventive therapy as their primary care.

This research prioritizes that the treatment of migraines demands universal strategies which include not only physiological symptoms but also mental and societal outcomes. A collaborative management plan is necessary because the patients with migraine may have also anxiety, any cardiovascular diseases, depression and insomnia. Proper management should focus on decreasing stigma through professional and societal education, seeking care from mental health services and treating patients by understanding each stage of migraine and giving care according to that. All these points are very useful to improve the quality of life and decrease the interictal burden of the migraine sufferers.

The main barrier to approach for medical care is the unavailability of healthcare system in low and middle income countries, need for better health care system in these countries are very essential. Disparities in diagnosis and management should be the main course of action in people with low socioeconomic conditions.

The requirement of professional setting rule that include people with migraines are highlighted by substantial economic burden of migraines in United States, which is supported by lost of efficiency and medical expenses. These rules may include better policies for medical expense for chronic migraine treatments, management of stress and accommodating work schedules. Resources should be implemented to identify high risk sufferers and should prevent the transition from acute to chronic.

People who are suitable for preventive therapy for migraine either should not receive or stop taking it soon, because various population based studies in United States suggests that discontinuation leads to incomplete or ineffective therapy for the patients. They will get extra advantages by doing behavioral therapies like awareness based techniques and intellectual behavioral therapy which are advised as prevention for people who have stigma. By acknowledging the broader effects of this condition alternatively emphasizing on the number of headaches days can understand the suffering and intensity of this disease and can deliver a proper management to decrease their stigma. Furthermore, if possible, health care providers should enlighten in receiving Individuals with Disabilities Education Act (IDEA) aids in schools and Family Medical Leave

Act benefits in workplace. They should also educate about Americans with Disabilities Act (ADA) in United States.

Since Migraine is an unfair disease and its stigma leads various problematic actions in public settings, public health in lowering stigma is very important for sufferers well being. Even though it is one of the most disabling disease worldwide, it still receives only a tinge amount of funding for NIH research. The support is essential to contribute more valuable and substantial public resources to educate people about this condition and make a pathway for its wane.

Conclusion

Since migraine is a complex neurological condition, it impacts individuals interpersonal, emotional and physical health. Misunderstanding migraine as a simple headache ignoring it as a serious neurological disease and seeing migraine sufferers as weak and considering they are faking about their health condition induces stigma associated with migraines. Medical professionals may also misunderstand about this condition and leads to incorrect and under diagnosis or under treatment. Moreover, stigma is mainly affected in workplaces because of its disability.

By declining self worth, demoralizing people from seeking care and making them feel guilty or weak induce internalized and enacted stigma which can leads to disability. Disability can lead to interpersonal discrimination and barrier in healthcare, which decreases the access to treatment. These aspects act together to produce spiteful cycle which increases the societal, emotional and physical challenges.

By escalating chronic stress, anxiety, depression, mood swings, hypersensitivity and stigma associated with migraine increases the risk of interictal burden. Because stigma urge people to societal isolation, less support and less productive in schools or workplace, fear of judgment prevents them from doing their chores which leads to disability and positioning a new challenge to healthcare.

Because of internal fluctuations and the non transparency of its symptoms, the effect of societal prospects, migraine is difficult to de-stigmatize. Because people have different experiences in the attacks of migraines and may have different kinds for suffering. They may have different intensity of migraine so it's difficult to implement a common management technique for migraine. Public education is also entangled compared to other disorders because migraine have invisible symptoms like pain and sensitivity to stimuli and cognitive impairments making it more difficult to put into practice. Moreover, the workplace or family influences the level of stigma and disability, better working conditions and an understandable familial situation can improve their adverse effects. For example, studies show that people with better or flexible working conditions have less adverse effects of migraine and have better quality of life as compared to the people who works in a strict environment and many won't be able to be productive at work because of the disability caused by migraine stigma. More research or study is essential to implement effective and powerful therapies to decrease migraine stigma, interictalburden, disability and quality of life.

Recomendation

- Strengthen accessibility to care: Ensure access of both acute and preventive treatment are available for migraine. Education of patients and healthcare providers about various phases of migraine, it's unfair affects mentally and physically and ways to decrease stigma. Implementing individualized treatment plans for the patients and providing care through telemedicine so that even the disable patients can access to care without any obstacles.

- Foster Inclusive Environments in the Workplace and Educational Settings: promote the application of laws to make a room for migraine sufferers to release stress and take adequate rests during attacks such as sick leaves, flexible work schedules and work from home allowances. These implications can improve the sigma and quality of life.

- Broaden Public Outreach and Awareness Initiatives: encourage various programs and activities to educate people with migraine to break the misconception regarding its affects as a serious neurological condition which has an adverse affect of their mental and emotional state. Better support for the migraine sufferers will result in increased understanding and warmth.

- Monetary support initiatives: financial support should be given to the patients with low socioeconomic status, any private funding can be given to the patients in this category to pay for their hospital and pharmacy bills which are not covered by an insurance. If the people cannot support them financially at least few organizations can make a way to contact with any nonprofit funding groups.

• Propel Research and Innovation Forward: new treatment or prophylactic strategies occurs from more research itself. Supporting studies and researches on this kind of hidden and highly misunderstood diseases can help people to reduce stigma among sufferers. Supporting researches on lifestyle, hereditary and neurological elements will assist in establishment of individualized treatment plans. Reducing the financial and individual effects of migraines requires a combination of medical and non-medical strategies.

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