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UNVEILING STRESS PATTERNS IN INDIA: AN ONLINE SURVEY ANALYSIS

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ABSTRACT

This study examines stress trends in India by analysing data from an online survey conducted with a diverse group of participants. Respondents shared their stress levels, specific stressors, initial reactions, and the perceived impact on their mental and physical well-being. The research also looks into how factors such as age, gender, marital status, occupation, education, and other variables influence individual stress experiences. The findings indicate that major stressors include work-related deadlines, personal relationships, financial instability, and academic pressures. While reactions to stress can vary widely, common responses include anxiety, physical symptoms like headaches, and behavioural changes such as increased irritability or withdrawal. The study further explores coping strategies, revealing that engaging in hobbies, spending time with family and friends, exercising, and listening to music are popular methods, though their effectiveness can differ from person to person. Additionally, the survey investigates the dual role of technology as both a source of stress and a potential tool for relief; while social media pressures and constant notifications can exacerbate stress, technology-based

relaxation techniques can sometimes provide relief. The findings highlight the importance of managing stress through adaptable coping strategies and accessible support networks. Finally, a significant observation points to the need for increased awareness and resources for mental health, particularly the low rates of professional mental health service utilization. This research offers important insights into the conversation surrounding mental health and stress management in India, emphasizing the necessity for targeted interventions.

Keywords: Stress management in India, Mental health resources, Coping strategies, Technology and stress, Stress survey analysis

INTRODUCTION

Stress is a common issue in today's society that impacts individuals from various backgrounds, affecting both their mental and physical well-being **[1-2]**. In India, factors such as rapid social and economic changes, heightened expectations at work and school, and increasing financial uncertainty have led to rising stress levels **[3-6]**. Researchers at Parul University aim to gain a deeper understanding of stress patterns within the Indian population by examining key factors such as age, occupation, gender, and marital status. The study focuses on the prevalence of stress, typical coping mechanisms, and frequent triggers, utilizing data collected from an online survey **[7-8]**. Additionally, it explores the dual role of technology in both exacerbating and alleviating stress. By uncovering these stress patterns, this research seeks to enhance the ongoing dialogue about mental health in India, ultimately improving access to mental health resources and developing effective stress management strategies **[9-10]**.

METHODS

Recruitment and Sampling Procedures

Researchers from Parul University, specifically the Parul Institute of Pharmaceutical Education and Research and the Parul Institute of Pharmacy & Research, conducted this study. The target population included a diverse group of individuals from across India. To ensure broad accessibility, an open online call for participants was shared through professional networks and social media. Participants voluntarily completed the online survey, with strict measures in place to maintain confidentiality and anonymity. The inclusion of individuals from various age groups, educational backgrounds, professions, and marital statuses allowed for a comprehensive analysis of stress patterns among different demographic groups. There were no incentives offered for participation.

Online Survey

To collect data on stress levels, triggers, and coping strategies, an online survey was developed using Google Forms. The questions ranged from demographic details

to specific inquiries about the sources of stress, its impact on both the body and mind, and various coping methods **[11-12]**. To gain deeper insights, the survey encouraged participants to provide both multiple-choice and open-ended responses **[13]**.

Perceived Stress Scale

Participants rated their overall stress levels on a scale from 1 to 10, where 1 meant "Not at all stressed" and 10 meant "Extremely stressed." This scale was designed to assess perceived stress over the past month. The straightforward nature of the scale allowed respondents to easily quantify their stress experiences. Higher scores indicated elevated stress levels, and the evaluations were used to examine psychological well-being across various demographic groups in the sample.

Consent Process

The participants were informed about the study's objectives, the confidentiality measures in place, and that their involvement was completely voluntary. To uphold ethical standards, consent was obtained prior to completing the survey, and contact details were provided for any inquiries.

Statistical Analysis

Descriptive statistics were used to analyse stress levels, common triggers, and demographic information. Additionally, calculations were performed to assess the prevalence of specific stress reactions, coping strategies, and views on the role of technology. The study also explored the relationships between stress levels and demographic factors to identify trends.

Response Rates

A large number of participants finished the online survey completely, showing a strong response rate. The sample size gathered is adequate for meaningful analysis of stress patterns across various demographic factors such as age, occupation, and marital status, even though specific response rates and completion times were not provided. Responses were combined, and no comparisons were drawn based on individual locations or other potentially identifying details to maintain participant confidentiality.

RESULTS

Demographic Overview

The study involved 82 participants, primarily from the 21-30 age group, which made up 52.4% of the total. This was followed by those aged 11-20 at 30.5%, 31-40 at 9.8%, 51-60 at 4.9%, and finally, 41-50 at 2.4%. The gender distribution was equal, with 50% male (41 participants) and 50% female (41 participants).

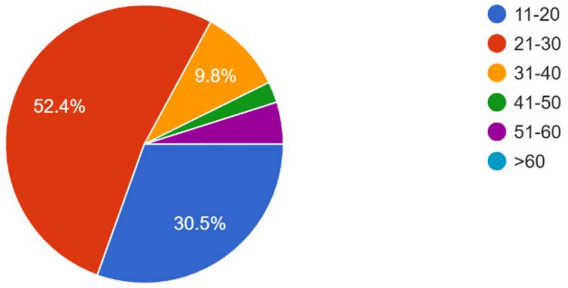

Figure 1: Age group of participants

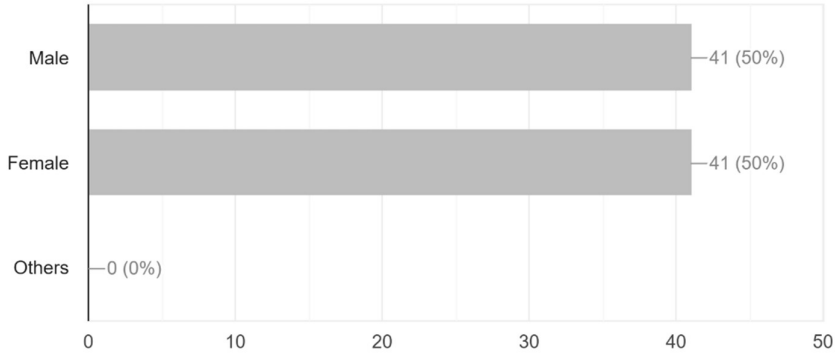

Figure 2: Sex (Gender) of participants

In terms of occupation, the majority of participants were students, making up 57.3% of the group. Others were employed in various jobs (31.7%), engaged in business (4.9%), or were unemployed (2.4%). A small fraction of respondents worked in home industries (1.2%), were homemakers (1.2%), or identified as housewives (1.2%). The educational backgrounds of the participants varied, with most holding a postgraduate degree (48.8%), followed by those with a bachelor's degree (36.6%), high school diplomas (9.8%), and doctorate degrees (4.9%).

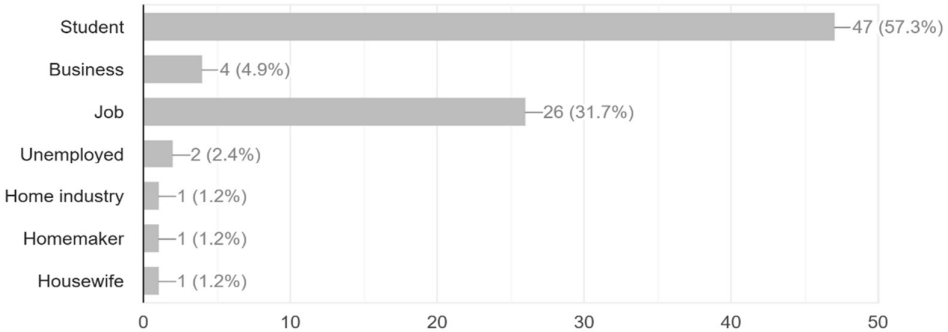

Figure 3: Occupation of participants

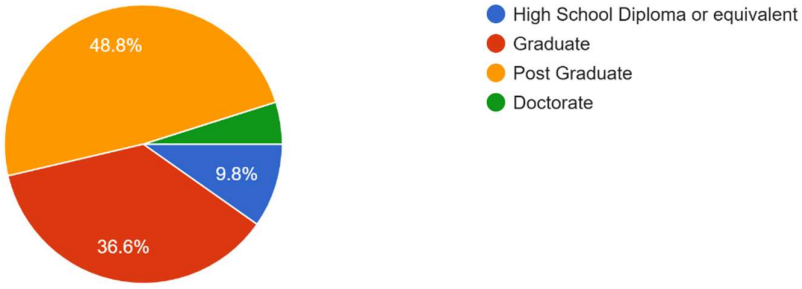

Figure 4: Education level of participants

Marital status was predominantly single (79.3%), with 20.7% married, while no participants identified as divorced or preferred not to disclose their marital status. This demographic diversity enables a comprehensive understanding of stress patterns across varied backgrounds.

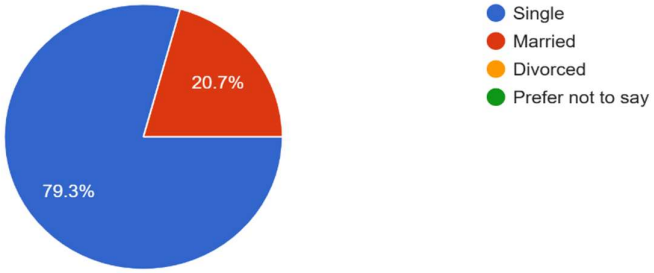

Figure 5: Marital Status of participants

Stress Levels and Triggers

The survey showed a range of stress levels among participants, using a 1-10 scale for ratings. Interestingly, 17.1% of respondents reported their stress at level 5, which indicates moderate stress. Higher ratings were also prevalent, with 15.9% scoring an 8 and 12.2% giving a score of 7. On the lower end, some participants rated their stress as low as 1 (9.8%) or 2 (8.5%), while only 2.4% indicated the highest level of stress at 10. This variety highlights the different intensities of stress experienced by the group.

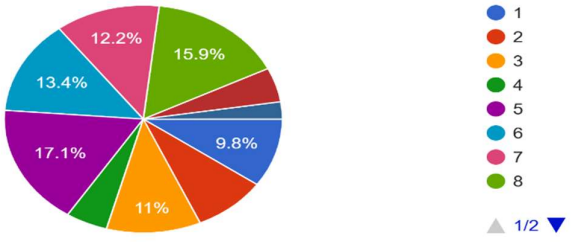

Figure 6: Stress level of participants

Participants reported several common stress triggers, with academic pressures and exams (40.2%) emerging as the most frequent source. Other significant triggers included

work-related deadlines (37.8%), financial difficulties (35.4%), and health issues (32.9%). Additional stressors such as conflicts in personal relationships (26.8%), lack of work-life balance (20.7%), and traffic delays (11%) were also reported, while a few participants cited unique situations like social media pressures (3.7%) and crime or harassment (1.2%).

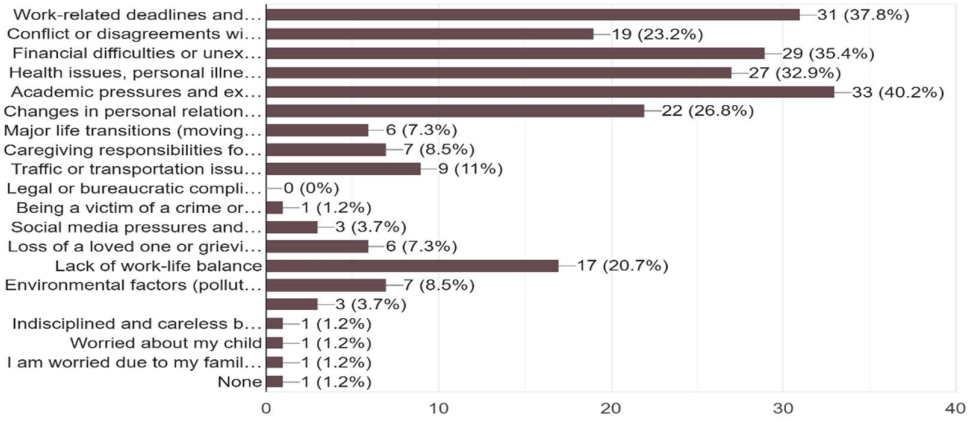

Figure 7: Recent situations that triggered stress to participants

Initial reactions to stress varied widely. Physical symptoms such as tension and headaches were prevalent, affecting 43.9% of participants, while emotional responses like anxiety and restlessness were reported by 39%. Many respondents also expressed feelings of frustration (36.6%), helplessness (17.1%), and a mix of emotions like sadness or confusion (32.9%). Strategies such as seeking support from friends or family (13.4%), engaging in distraction activities (17.1%), or attempting relaxation techniques (9.8%) were also noted, though their perceived effectiveness varied.

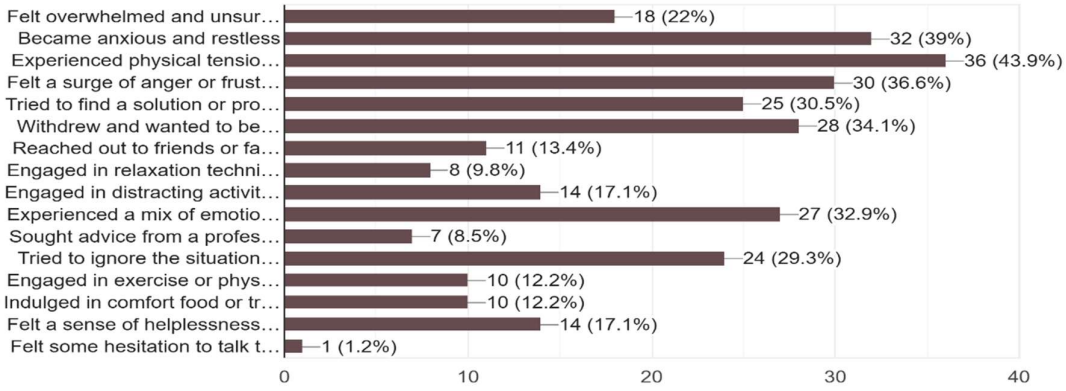

Figure 8: Reactions of participants to stress

Chronic or high levels of stress were reported to have substantial impacts on both physical and emotional health. Physically, participants experienced sleep disturbances (57.3%), decreased energy (47.6%), and frequent headaches (36.6%). Emotionally,

mood swings (51.2%), reduced happiness (47.6%), and concentration issues (37.8%) were common, with some respondents reporting strained relationships (15.9%) and social withdrawal (15.9%).

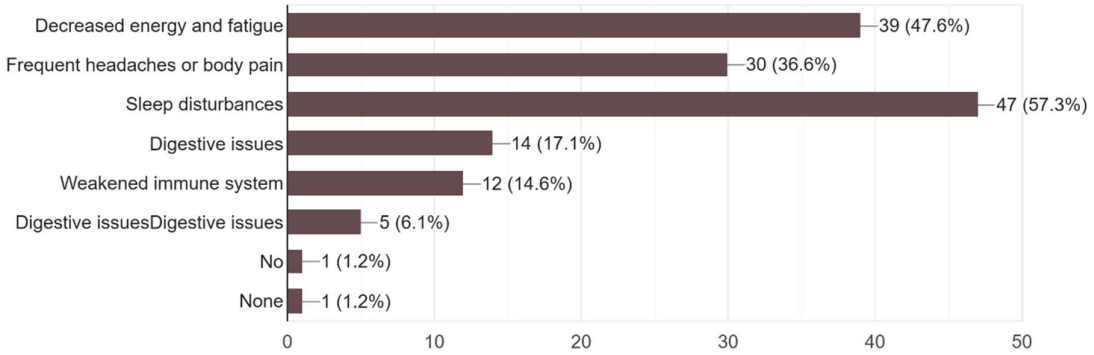

Figure 9: Impact of stress on physical health of participants

When reflecting on changes in stress levels over the past year, nearly half (47.6%) indicated an increase in stress, while 32.9% felt it remained stable and 19.5% reported a decrease. These findings highlight the pressing need for effective stress management strategies and support systems to help individuals cope with ongoing stressors.

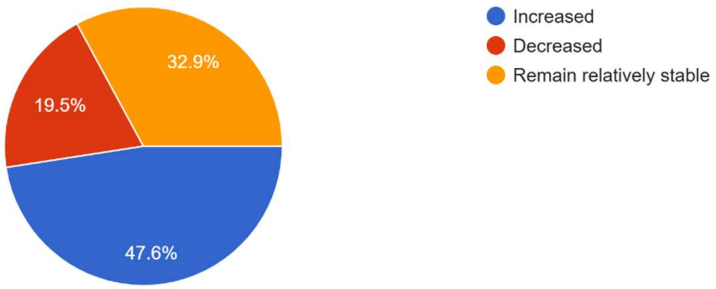

Figure10: Stress level of participants over the past year

Coping Mechanism

Participants used various strategies to manage stress, with listening to music (67.1%) and spending time with loved ones (47.6%) being the most common. Many also pursued hobbies (40.2%), engaged in humour (35.4%), and practiced physical exercise (30.5%) or religious activities (30.5%) to alleviate stress. Mindfulness practices, such as meditation, were used by 23.2% of respondents, though their effectiveness varied. Less common strategies included journaling (12.2%), relaxation techniques (19.5%), online support (7.3%), and professional therapy (7.3%). These findings suggest a preference for accessible methods, with limited reliance on formal mental health resources.

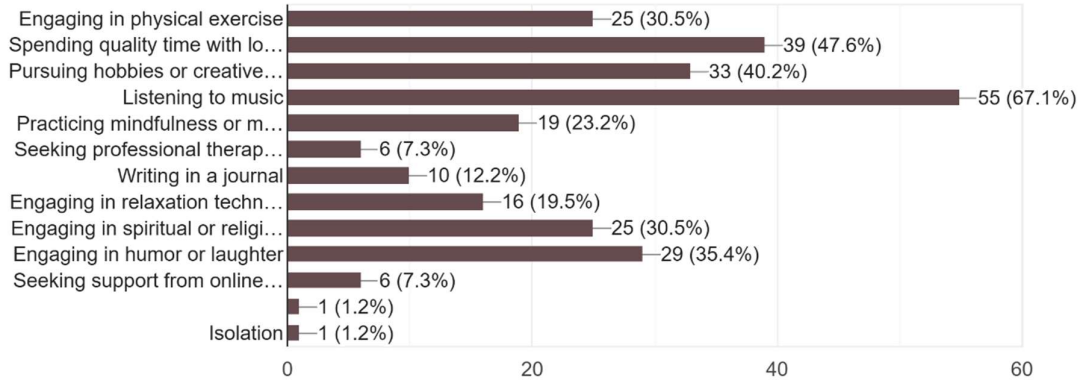

Figure 11: Coping mechanism of participants

Technology's Role

Participants expressed mixed feelings about technology's impact on their stress levels. A significant portion (43.9%) reported feeling stressed "rarely" due to technology-related factors such as constant notifications and social media pressure. However, 31.7% experienced tech-related stress "occasionally," while 17.1% felt it "often," and 7.3% "very often."

Despite the stress technology can cause, many participants also viewed it as a potential relief tool. About 31.7% felt that technology definitely aids in relaxation, with another 37.8% agreeing that it helps "sometimes." Some respondents were neutral on this (22%), while a smaller percentage felt that technology is not helpful for stress relief (6.1% "not really" and 2.4% "not at all"). These responses reflect technology's dual role, where it can both add to and alleviate stress, depending on usage and context.

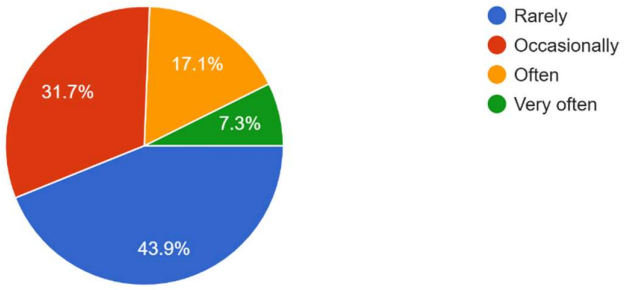

Figure 12: Technology's role on stress

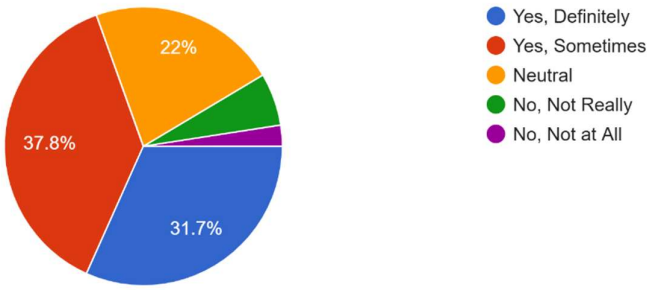

Figure 13: Technology's role on stress relief

Professional Help Seeking

The survey revealed that only 26.8% of participants had sought professional help or guidance for managing stress, while a substantial majority (73.2%) had not. This low rate of professional help-seeking suggests possible barriers to accessing mental health resources, such as stigma, cost, or limited availability of services. The findings underscore the importance of increasing mental health awareness and accessibility, as well as addressing the social stigma associated with seeking support. Promoting mental health resources and creating supportive environments may encourage more individuals to pursue professional help when needed.

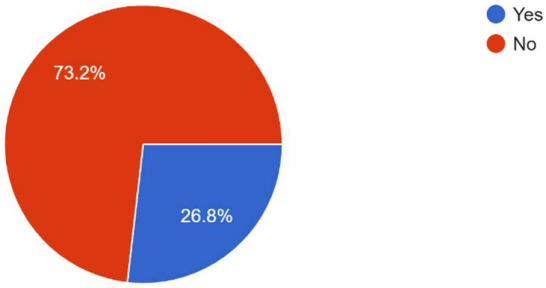

Figure 14: Participant's Professional Help for Stress

DISCUSSION

The study's findings indicate that individuals experience varying levels of stress, influenced by demographic factors such as age, occupation, and education. Most participants were aged between 21 and 30, a group often dealing with significant stressors related to social changes, early career challenges, and academic demands **[14]**. While the equal representation of genders allows for a broader understanding of stress patterns, further research could explore potential differences in stressors and coping mechanisms based on gender **[15]**. Consistent with earlier studies on stress among younger and working individuals, common stressors identified by participants include academic pressures, work deadlines, and financial worries. Academic stress was the most frequently mentioned trigger,

especially among the student demographic, which comprised a large portion of the sample. Financial issues and work-related deadlines also had a significant impact, underscoring the challenges of balancing personal and professional responsibilities in today's fast-paced environment. Additionally, social stressors, such as conflicts with loved ones and difficulties in maintaining work-life balance, further complicate the landscape of stress in everyday life **[16]**.

Physical symptoms such as headaches and emotional responses like anxiety were the most common initial reactions to stress. Many people reported feelings of uncertainty, helplessness, or frustration, which are typical responses when facing significant stress. Engaging in hobbies, spending time with family and friends, and listening to music emerged as the most popular coping strategies, suggesting a preference for easily accessible methods **[17-18]**. The relatively low engagement in professional mental health support highlights potential barriers like stigma or limited access **[19-20]**. While informal coping strategies can be helpful, the data suggests that professional support is crucial for effectively managing chronic stress, especially when it adversely affects one's physical or mental well-being **[21]**.

The relationship between technology and stress is intricate; while some individuals reported that the pressures of social media and constant notifications increased their anxiety, others discovered that apps for guided meditation and music provided a way to relax. This dual impact highlights the importance of using technology mindfully **[22]**. Digital tools can aid in stress management and relaxation, but overuse or exposure to negative online content can exacerbate stress. Promoting awareness of the benefits of mindful technology use may help individuals reduce its adverse effects while enhancing its positive aspects **[23]**.

Ultimately, the findings underscore the urgent need for better stress management strategies. By increasing awareness of mental health resources and removing barriers to accessing professional help, individuals can be encouraged to seek the support they need. Furthermore, organizations such as workplaces and schools can play a vital role in fostering resilience and teaching healthy coping strategies for stress by providing resources and creating environments that prioritize mental well-being.

CONCLUSION

By identifying common stressors, initial reactions, and coping strategies, the study provides valuable insights into stress patterns within a diverse group. The findings indicate a reliance on readily available methods, like music and social support, while showing a reluctance to seek

professional help due to potential barriers. Enhancing stress management techniques can be achieved by promoting mental health resources, encouraging mindful technology use, and fostering supportive environments, all of which will ultimately enhance individuals' overall well-being.

Ethics Approval and Consent to Participate

Ethical review and approval were not required for this study on human participants in accordance with local legislation and institutional guidelines. Participants were informed that their responses would contribute to a deeper understanding of stress and its effects on individuals. They were assured that their answers would remain confidential and be used solely for research purposes.

Consent for Publication

Consent for publication was obtained from all participants. They were informed that aggregated results would be published while ensuring individual confidentiality.

Availability of Data and Material

The data supporting the findings of this study are available upon reasonable request from the corresponding author, Dr Jagdish Kakadiya (jagdishkakadiya@gmail.com).

Competing Interests

The authors declare that they have no competing interests.

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Authors' Contributions

Yash Janve contributed to the conceptualization of the study, development of the online survey questionnaire, data collection, and preparation of the initial manuscript draft. Devshree Parmar assisted in supervising the study, interpretation of the data, and critical revision of the manuscript. Anuraag Rai contributed to the literature review, validation of the survey content, data analysis, and manuscript editing. Jagdish Kakadiya provided overall guidance for the study, validated the study design, contributed to statistical interpretation, and performed the final review of the manuscript. All authors read and approved the final version of the manuscript.

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