

LETTERS TO THE EDITOR

Innov Clin Neurosci. 2026;23(4–6):5–9.

Navigating Desire and Danger: Examining Sexual Violence Vulnerabilities Among Men Who Have Sex With Men and the LGBTQ+ Community on Dating Apps

Dear Editor:

Dating apps and other social networks (DSN) that allow individuals to look for love and romance have fundamentally changed the big picture of the social scene for gay and bisexual men. It has created a level of unprecedented access where they can easily meet potential romantic and sexual partners. Apps such as Grindr, Scruff, Tinder, and Hornet have not only facilitated connections but have also created new dynamics of risk, particularly in the realm of sexual violence (SV) victimization, as reported recently reported, concerning men who have sex with men (MSM).¹

Given that MSM face a certain heightened risk of sexually transmitted infections (STIs) compared to straight men,² there's also a keen need to look closely at the overlap between popular dating apps and STI risk.

What makes DSN apps so appealing is their convenience and how easy they are to use. They give people who often feel undervalued or at odds with the society a way to connect with others who share their interests and ideas. These apps help people go from being isolated individuals to having a community of shared values and goals around them. These platforms provide a space where users can express their identities freely, meet others who share their experiences, and explore relationships that might otherwise be difficult to form in offline settings.³ Among all apps, Grindr appears to be the most prominent app for same-sex male relationships that connects users quickly. Grindr excels because users can easily double-check each other's locations through its location features.⁴ Scruff stands out with a big emphasis on community building and a wider range of what people are looking for when they date there. Tinder is designed for a broad and diverse user base, including heterosexual and LGBTQ+ individuals. It is a go-to for people who want either something short term or long term. Hornet is known for incorporating social network elements into the app, and it can give people a

deep feeling that connects beyond just hookups. While these platforms afford users huge benefits, they also expose them to some big risks, such as risks to personal safety.⁵

Additionally, dealing with drug use and STIs increases the risks faced by MSM (and lesbian, gay, bisexual, transgender, queer, and other [LGBTQ+] individuals in general) when things get managed through apps. The anonymity and rapid connections facilitated by these platforms can lead to impulsive decisions regarding substance use, which may impair judgment and lead to risky sexual behaviors as well as violence. Studies have shown that substance use, particularly alcohol and drugs, is often associated with increased likelihood of engaging in unprotected sex, heightening the risk of STIs.⁶ Additionally, the pressure to conform to certain social norms within these digital spaces can contribute to higher rates of substance use, further complicating the landscape of sexual health for LGBTQ+ individuals.⁷

It is imperative that users are educated not only about the risks of SV but also about the potential health implications associated with substance use and the importance of safer sex practices.

Spotting warning signs that may indicate escalating levels of potential danger, commonly categorized as yellow, orange, and red flags, can help users recognize risky situations and make safer decisions when interacting through DSN apps¹:

- Yellow flags serve as initial indicators that a potential partner may pose a risk but do not necessarily warrant immediate disengagement. This might involve personal details that are murky or inconsistent, a disinclination to share personal information like contacts or identification (ID) numbers, or an obsession with maintaining strict privacy. While these factors alone may not signify an imminent threat, they require users to exercise caution and gather more information before proceeding. MSM as well as LGBTQ+ individuals using DSN apps often encounter profiles that lack clear photos, provide only minimal information, or evade direct questions about identity and intentions. Such behaviors can signal an attempt to

obscure true motives, potentially putting users at risk.

- Orange flags represent more serious warning signs that suggest the need for heightened vigilance. This may include intense pressure to meet alone in private locations, sexually aggressive or coercive messaging, dismissive attitudes toward personal safety concerns, or behaviors that minimize, ignore, or challenge the importance of consent and personal boundaries. MSM navigating DSN apps can encounter individuals who push boundaries or attempt to create situations where power dynamics are skewed in their favor. When an individual insists on meeting in secluded areas, refuses to engage in conversations about boundaries, or exhibits controlling behavior, users must recognize these as cautionary signals. Addressing these concerns proactively (whether by seeking additional verification, choosing public meeting locations, or maintaining communication with trusted friends) can mitigate the potential for harm.
- Red flags are clear indicators of danger that should prompt immediate disengagement. These include direct threats, belligerent or aggressive behavior, outright refusal to accept no for an answer, or extensive history of predatory behavior. MSM have reported instances where matches on DSN apps have displayed aggressive tendencies, issued ultimatums, or leveraged psychological manipulation to force encounters. The lack of strict identity verification on many DSN platforms further exacerbates this issue, as perpetrators can create multiple profiles, hide behind fake identities, or exploit the relative anonymity of digital spaces to avoid accountability. When a person starts doing risky things, the safest thing to do is to step away.

The results of this study provide important building blocks for understanding how MSM assess risks in digital situations,¹ and these findings could and should be generalized to the entire LGBTQ+ community. However, more research is needed to determine whether these perceived risk factors correlate with actual

instances of SV perpetration. Additionally, educating MSM, as well as all LGBTQ+ people, on how to navigate DSN apps safely can be a crucial step in reducing victimization.

More apps that deal with dating and romantic relationships are starting to add safety features. They require users to verify their profiles first through security measures such as photographic identification or personal background checks. They also have systems that let people report troubling or concerning interactions directly through the app itself and may automatically notify users when they detect that a match that potentially poses an unsafe situation. However, these measures alone are insufficient without broader efforts to educate users on recognizing and responding to risk factors effectively.

Ultimately, reducing SV risk among MSM using DSN apps requires a multifaceted approach that includes platform accountability, user education, and broader societal efforts to challenge stigma and discrimination. While DSN apps provide incredible benefits for connection and expression, there are also serious risks that must be managed. Encouraging talk that includes putting safety first and setting up stronger ways to make sure people who use the internet are who they say they are can combat risks too and create a safer zone on the digital planet for both MSM and LGBTQ+ just looking for connection with others.

With regards,

ROCCO SALVATORE CALABRÒ, MD, PhD

Dr. Calabrò is with the Neurorehabilitation Unit at IRCCS Centro Neurolesi "Bonino-Pulego," Messina, Italy.

Funding/financial disclosures. *The author has no relevant conflicts of interest. No funding was received for the preparation of this letter.*

Correspondence. *Rocco Salvatore Calabrò, MD, PhD; Email: roccos.calabro@irccsme.it*

REFERENCES

1. Korovich M, Nicoletti A, Bettinelli M, et al. "That's definitely a red flag": sexual violence risk perception by men who have sex with men using dating and sexual networking apps. *Sex Cult.* 2025;29(2):838–851.
2. Olakunde BO, Adeyinka DA, Ujam C, et al. Sexual violence and the increased risk of HIV among MSM in Nigeria. *AIDS Behav.* 2025;29: 2117–2124.
3. Kwok I, Wescott AB. Cyberintimacy: a scoping review of technology-mediated romance in the digital age. *Cyberpsychol Behav Soc Netw.* 2020;23(10):657–666.
4. Bhana D, Reddy V, Moosa S. Sabelo's journey as a young Black gay man in South Africa and the potential of the Grindr app. *J Homosex.* 2024;72(9):1772–1788.
5. Babcock N, Zarate J, Wang S, et al. How LGBTQ+ young adults navigate personal risk in app-based hookups: the safety spectrum theory. *Arch Sex Behav.* 2024;53(6):2347–2359.
6. Jennings TL, Gleason N, Nieblas F, et al. Chemsex and compulsive sexual behavior among sexual minority men. *J Sex Med.* 2025;22(4):658–662.
7. Nelson R, Robards B, Churchill B, et al. Social media use among bisexuals and pansexuals: connection, harassment and mental health. *Cult Health Sex.* 2023;25(6):711–727. **ICNS**

Nocturnal Tactile and Visual Hallucinations Associated with Clonidine Use

Dear Editor:

Clonidine is a central acting alpha-2 receptor agonist used for the treatment of psychiatric disorders and sleep difficulties. We report a pediatric patient who developed visual and tactile hallucinations after starting clonidine therapy to address sleep-onset insomnia.

A 6-year-old twin male patient with a history of eczema, asthma, and frequent ear infections now status post-tympanostomy tube placement and adenoidectomy presented to sleep medicine clinic as part of an evaluation for hyperactive and aggressive behaviors. The patient was otherwise cognitively well developed. His sleep history was notable for sleep onset difficulties, taking longer than 30 minutes to fall asleep due to mind racing symptoms, restlessness, and difficulty settling. Other sleep concerns included rare night terrors, leg kicking, and an occasional "tingling" sensation in his legs at the beginning of the night. However, his leg symptoms were not a nightly occurrence and did not consistently interfere with sleep.

His medications included an albuterol inhaler, budesonide, levocetirizine, and fluticasone nasal spray during times of seasonal allergies. He had previously tried melatonin for his sleep difficulties, but this was discontinued due to the concern for worsening aggression. His physical

exam was unremarkable. His labs were notable for a ferritin level of 32 ng/mL.

The patient was started on clonidine 0.1 mg at night to address sleep concerns. He slept well on the first night, but on Night 2 of treatment, he developed visual and tactile hallucinations during an awakening in the middle of the night. These hallucinations consisted of bugs crawling on himself, as well as seeing bugs on others.

He presented to the emergency department after the third night of hallucinations and was advised by a psychiatrist to discontinue clonidine therapy. The hallucinations resolved 1 week after stopping the medication. A polysomnography study was also performed around 1 week after stopping clonidine. The study showed normal sleep architecture, normal electroencephalography findings, and no parasomnia activity or significant periodic limb movements.

Clonidine is used for the treatment of sleep difficulties by helping to decrease sleep onset latency. Commonly reported side effects include hypotension, dizziness, and fatigue, with few case reports describing clonidine-associated auditory or visual hallucinations in adults.^{1–3} To our knowledge, this is the first published case highlighting a pediatric patient with clonidine-associated hallucinations who had both visual and tactile disturbances during middle of the night awakenings. The mechanism for clonidine-induced nocturnal hallucinations is unclear. One possibility is that clonidine is known to reduce and disrupt rapid eye movement (REM) stage sleep, and the patient's nocturnal hallucinations may be due to disturbances related to this.⁴ While the patient's polysomnography study did not show any significant abnormalities in his sleep architecture, it is possible any alterations in sleep architecture normalized after discontinuation of the medication and by the time of the study. Like other reports, clonidine-related hallucinations resolved shortly after discontinuing therapy. While hallucinations appear to be rare, it is important to monitor and counsel patients about this serious side effect after initiating clonidine.

With regards,

ANDREW LIGSAY, MD, and LISA MONTAGANO, MPH, BSN, RN

Dr. Ligsay is with the Division of Pediatric Cardiology, Ann & Robert H. Lurie Children's Hospital, Chicago,

Illinois. Ms. Montagano is with the Division of Pediatric Pulmonary & Sleep Medicine, Ann & Robert H. Lurie Children's Hospital, Chicago, Illinois.

Funding/financial disclosures. The authors have no relevant conflicts of interest. No funding was received for the preparation of this letter.

Correspondence. Andrew Ligsay, MD;
Email: aligsay@luriechildrens.org

REFERENCES

1. Bestha DP, Madaan V. Clonidine and auditory hallucinations. *Innov Clin Neurosci*. 2012;9(9):10.
2. Brown MJ, Salmon D, Rendell M. Clonidine hallucinations. *Ann Intern Med*. 1980;93(3):456–457.
3. Delaney J, Spevack D, Doddamani S, Ostfeld R. Clonidine-induced delirium. *Int J Cardiol*. 2006;113(2):276–278.
4. Gentili A, Godschalk MF, Gheorghiu D, et al. Effect of clonidine and yohimbine on sleep in healthy men: a double-blind, randomized, controlled trial. *Eur J Clin Pharmacol*. 1996;50(6):463–465. **ICNS**

Response to “Validation of a Pediatric Cognitive Assessment Tool to Advance Knowledge on Children’s Cognitive Development, Health Risk Factors, and Health-Promoting Interventions in Sub-Saharan Regions”

Dear Editor:

We read with great interest the study by Di Cesare et al,¹ which introduces the Cognitive Assessment Tool for Pediatric Clinical Research (CAT-PCR), a novel, brief, and culturally situated nonverbal cognitive battery validated in Zambian school-aged children. The authors are to be commended for explicitly modeling visuographomotor constructional processing and selective attention as separable constructs, and for applying structural equation modeling with item response theory to support multidimensional construct validity.

However, the decision to interpret reproduction inaccuracy scores solely as indicators of cognitive deficit, without modeling potential behavioral or affective intermediaries, may constrain the explanatory scope of the tool.² The Visuographomotor Constructional Processing (VGCP) index may partly reflect anxiety-related

task disengagement, especially under delayed memory or closed-eye conditions, where stimulus absence may amplify disengagement effects.³ Incorporating observer-rated behavioral measures during test administration, such as fidgeting or avoidance behaviors, could clarify whether such inaccuracy is mediated by cognitive difficulty or motivational withdrawal. This distinction may be especially relevant in older children where anxiety traits and internalized stigma from chronic illness are more prevalent.

The exclusion of children with formal educational interruptions, while pragmatic for initial feasibility, limits the tool's generalizability across the broader Zambian pediatric population. Importantly, cognitive performance may differ not only due to school exposure, but also due to variable literacy practices in home environments.⁴ Incorporating a literacy-neutral visual sequencing task, or a drawing reproduction task without symbolic elements, could help decouple the contribution of formal education from intrinsic visuospatial integration ability, thereby enhancing inclusivity and external validity.

Finally, although test–retest reliability for both the VGCP and Visuomotor Processing indices was strong, the omission of inter-rater reliability estimates leaves open the question of scoring consistency in real-world deployments. Given the reliance on visual inspection of subtle graphic errors, such as morphology and spacing, standardization across raters is critical for deployment in multicenter trials and community-based screening.⁵ Training protocols, blinded duplicate scoring, or automated digital scoring overlays may strengthen reproducibility and future scalability.

We commend the authors for addressing a critical measurement gap in Sub-Saharan cognitive health research and for advancing a culturally adapted, psychometrically robust tool. Further research validating CAT-PCR in rural, educationally diverse populations and exploring its responsiveness to therapeutic interventions may support its integration into clinical and epidemiological research frameworks across the region.

With regards,

**KISHANKUMAR MAHIDA, MD, and
SNEHAL RAJENDRA JAGTAP, PhD**

Dr. Mahida is with the Dr. D. Y. Patil Medical College Hospital and Research Centre, Dr. D. Y. Patil Vidyapeeth (Deemed-to-be-University), Pimpri, Pune, 411018, Maharashtra, India. Dr. Jagtap is with the Dr. D. Y. Patil Dental College and Hospital, Dr. D. Y. Patil Vidyapeeth (Deemed-to-be-University), Pimpri, Pune, 411018, Maharashtra, India.

Funding/financial disclosures. The authors have no relevant conflicts of interest. No funding was received for the preparation of this letter.

Correspondence. Kishankumar Mahida, MD;
Email: kishankumar.mahida@proton.me

REFERENCES

1. Di Cesare F, Di Carlo C, Di Cesare L. Validation of a pediatric cognitive assessment tool to advance knowledge on children's cognitive development, health risk factors, and health-promoting interventions in sub-Saharan regions. *Innov Clin Neurosci*. 2025;22(10–12):33–51.
2. Martinez KA, Sayers C, Hayes C, et al. Normal cognitive test scores cannot be interpreted as accurate measures of ability in the context of failed performance validity testing: a symptom- and detection-coached simulation study. *J Clin Exp Neuropsychol*. 2021;43(3):301–309.
3. Huang X, Levine S, Paradiso MA. Rebounding V1 activity and a new visual aftereffect. *J Vis*. 2008;8(3):25.1–10.
4. Arya DJ, McClung NA, Maul A, Cunningham AE. The effects of early home literacy environments on fourth-grade literacy achievement: an international comparison. *Int J Quant Res Educ*. 2014;2(1):1–16.
5. Parashari A, Singh V. Reasons for variation in sensitivity and specificity of visual inspection with acetic acid (VIA) for the detection of precancer and cancer lesions of uterine cervix. *Asian Pac J Cancer Prev*. 2013;14(12):7761–7762. **ICNS**

Responding to Correspondence on “Validation of a Pediatric Cognitive Assessment Tool to Advance Knowledge on Children’s Cognitive Development, Health Risk Factors, and Health-Promoting Interventions in Sub-Saharan Regions”

Dear Editor:

We would like to thank the readers for their thoughtful and constructive comments on our

study.¹ We believe these observations are highly valuable in guiding test developers in the design and implementation of future studies aimed at validating the Cognitive Assessment Tool for Pediatric Clinical Research (CAT-PCR) and similar psychometric instruments.

The validation of a new psychometric instrument requires an iterative, stepwise process to build the evidentiary foundation supporting its intended use in assessing specific constructs within defined populations and contexts. In the present study, we focused on the initial evaluation of the CAT-PCR's construct validity and reliability. Future investigations should further strengthen the evidence supporting convergent and discriminant validity of CAT-PCR score interpretation. In particular, the relationship between CAT-PCR indices and other cognitive domains—including executive functioning, intelligence, language, mental rotation, social cognition, sustained attention, visual and verbal memory, and visuomotor integration—should be systematically explored.

The readers' suggestion to assess situational anxiety through standardized behavioral measures, as well as to examine personality traits as potential moderators, is especially pertinent and may substantially contribute to further validation efforts. Psychosocial moderators are indeed highly relevant. Additionally, disentangling the effects of formal education from visuo-spatial constructional abilities represents another important aspect of the validation process.

Validation studies should prioritize the use of instruments originally developed within Sub-Saharan settings, rather than relying exclusively on imported tools adapted through cross-cultural validation. Nevertheless, an important limitation remains the limited availability of validated original psychometric instruments and measures that can serve as reference standards in these contexts.

The potential impact of exposure to environments that do not nurture learning, information exchange, or knowledge-sharing experiences beyond formal schooling was not specifically or systematically addressed in our study design. We collected and analyzed information from a subgroup of participants through structured interviews/questionnaires administered to parents or caregivers. Specifically, we assessed whether both parents/guardians lacked formal education and whether

the child experienced psychosocial deprivation related to parental/guardian absence or institutional care (eg, orphanage placement). However, the number of observations was insufficient to support robust conclusions regarding the influence of these factors on CAT-PCR scores.

We have also pursued the development of a digital automated scoring system to evaluate waveform reproduction accuracy in collaboration with the Department of Information Engineering and Mathematics, University of Siena (Prof. Salvietti and Dr. DeBona). The initial approach based on machine learning techniques and relatively simple waveform similarity algorithms based on Hausdorff distance was unsuccessful. For example, test–retest analyses demonstrated an intraclass correlation coefficient equal to 0; no significant correlation was observed between automated measures and clinician-based assessments of reproduction accuracy (unpublished data). At present, conducting a formal inter-rater reliability study can provide additional evidence supporting the reliability of CAT-PCR scores and their applicability in clinical research settings within urban populations. Given the limited time required for reproduction processing, scoring, and interpretation, centralized reading by an expert reviewer—when necessary, under blinded conditions—potentially remains a practical and efficient strategy for test scoring and interpretation in multicenter trial studies.

The design and implementation of future CAT-PCR studies across diverse rural and educational populations, as well as the evaluation of responsiveness to health interventions, remain substantially constrained by limited resources. Sustained access to both human technical expertise and financial support is essential to ensure the progressive advancement of the test validation process through its continued use in practice.

We hope that this letter may further stimulate the interest and engagement of stakeholders involved in the development of psychometric tools for assessing psychological and cognitive health among children and adolescents in under-resourced care settings.

With regards,

FRANCO DI CESARE, MD; CRISTIANA DI CARLO, MPhil; and LEONARDO DI CESARE, MD

All authors are with Leoben Research Aurora in San Vincenzo Valle Roveto (AQ), Italy.

Funding/financial disclosures. The authors have no relevant conflicts of interest. No funding was received for the preparation of this letter.

Correspondence. Franco Di Cesare, MD;
Email: f.dicesare@leobenresearch.com

REFERENCES

1. Di Cesare F, Di Carlo C, Di Cesare L. Validation of a pediatric cognitive assessment tool to advance knowledge on children's cognitive development, health risk factors, and health-promoting interventions in sub-Saharan regions. *Innov Clin Neurosci*. 2025;22(10–12):33–51. [ICNS](#)

Medical Errors in Psychiatry: The Case for a Global Perspective

Dear Editor:

I read with great interest the article by Pope, "An Overview of Medical Errors in Psychiatry, Part 1: Introduction,"¹ published in the January–March 2026 issue of *Innovations in Clinical Neuroscience*. The author provides a timely and well-structured framework for understanding medical errors in psychiatric practice, drawing on established terminology and insurance-based clinical data. As a clinical psychologist, I commend this contribution to a topic that has historically received insufficient attention within mental health disciplines.

However, I wish to draw attention to an important dimension that the article does not address: the heightened vulnerability to medical errors in psychiatric settings within low- and middle-income countries (LMICs). The article's foundational data, including estimates from the Institute of Medicine, malpractice liability records from Professional Risk Management Services (PRMS), and references to the Joint Commission's sentinel event framework, are rooted exclusively in high-income, Western healthcare contexts. While these frameworks are valuable, their direct applicability to LMIC settings is limited, and this gap warrants explicit acknowledgment.

Nath and Marcus,² cited by the author, identify systemic strain, inadequate insurance coverage, and lack of community resources as factors that increase psychiatric error. These conditions are

not merely occasional stressors in LMICs; they are often the baseline reality. In many such settings, psychiatrist-to-population ratios remain critically low, task-shifting to inadequately supervised nonspecialist providers is common, electronic health records are absent or unreliable, and structured suicide risk assessment protocols are rarely formalized.³ The “systems approach” to error that the author rightly advocates for requires functioning systems as its prerequisite, a condition that cannot be assumed globally.

Furthermore, culturally mediated diagnostic errors deserve specific attention in this context. Psychiatric symptom presentation varies across cultures, and clinicians operating with limited training or culturally incongruent diagnostic tools may be more prone to errors of misdiagnosis or delayed diagnosis, the very categories author identifies as primary error domains. Stigma, which the article references in the context of drug-dosing mistakes, also operates differently and more pervasively in LMIC settings, often discouraging help-seeking until illness severity is

advanced, compounding the risk of clinical error at the point of first contact.

I would encourage the authors to consider an explicit discussion of how error prevention strategies can be adapted for resource-constrained settings. This might include task-shifting frameworks with structured supervision, low-cost standardized assessment tools, and community-based safety nets as alternatives to the systems-level safeguards available in high-income settings. Such inclusion would substantially broaden the article’s impact and relevance to the global readership of this journal.

I thank the editors for the opportunity to contribute to this important conversation and look forward to the continuation of this series.

With regards,

MUQADAS FATIMA, MS

Ms. Fatima is with National University of Modern Languages, Lahore, Pakistan.

Funding/financial disclosures. *The authors have no relevant conflicts of interest. No funding was received for the preparation of this letter.*

Correspondence. *Muqadas Fatima, MS; Email: Muqadasfatima219@gmail.com*

REFERENCES

1. Pope J. An overview of medical errors in psychiatry, part 1: introduction. *Innov Clin Neurosci.* 2026;23(1–3):54–55.
2. Nath SB, Marcus SC. Medical errors in psychiatry. *Harv Rev Psychiatry.* 2006;14(4):204–211.
3. Fatima M, Ilyas U. Development of Ethical Dilemma Distress Scale for Mental Health Practitioners (EDDS-MHP). *Pak J Psychol Res.* 2024;39(3):613–637. 