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Letter to the Editor

# Smile, grimace or grin? Recalibrating psychiatrist-patient interaction in the era of face masks



Dear Sir,

COVID-19 has necessitated changes in the manner in which we carry on with our lives (Tandon, 2020a). The 'collateral damage' of COVID-19 pervades various aspects of our daily lives, economies and healthcare (Tandon, 2020b). The clinical landscape has transformed with use of face masks becoming routine. Face masks are an effective preventive measure for COVID-19 infection, but the benefits come at the cost of a 'psycho-social' barrier in the psychiatrist-patient relationship. In the absence of diagnostic tools in psychiatry, clinical interview is the gold standard to identify various mental and behavioral disorders. A good clinical interview with the patient requires theoretical knowledge, sound clinical skills, empathic and non-judgmental attitude, and also effective communication skills. Face masks eclipses the facial expressions and communication between the patient, their caregivers and the physician, and hence may have repercussions in doctor-patient relationship and overall treatment outcome.

The outcome of early visual operations to facilitate perception and memory for a human face is relevant for understanding higher cognitive processes (Ellis et al., 1986). The face masks constrain visual processes and subsequent cognitive operations. Therefore, wearing a face masks not only results in an inadequate or faulty mental representation of both the parties, but also affects cognitive processes involved during the interaction. This can have considerable implication for psychiatric disorders like schizophrenia where impaired emotion perception may result in misattributions. Face masks also impede patient physician familiarity, which may be associated with lower satisfaction among patient.

In addition to providing information regarding age, gender, race, and identity, facial expressions provide important cues about thoughts and emotions. Correct processing and interpretation of emotions conveyed by facial expressions is a central aspect for an effective interpersonal communication (Mancini et al., 2013). Recognizing positive and more so, negative facial displays, help in assessing the level of rapport between participants. Recognition of dysfunction in emotional prosody helps in early diagnosis and rehabilitation in schizophrenia patients. Face masks usually hide the lower half of the face and conceal facial expressions and emotional prosody. Hence, face mask may impact the appropriate recognition of emotions and thoughts, impede development of rapport and may ultimately paralyze a healthy interpersonal communication in the psychiatrist-patient relationship.

Paul Ekman states that recognizing the less obvious facial microexpressions of patients may be useful for a psychiatrist in his/her interactions with patients. Microexpressions are very fast facial movements lasting less than one-fifth of a second, are one important source of leakage of unconscious or deliberate suppression of emotions (Ekman, 2003). The pyramidal tract drives voluntary facial actions and originates in the cortical motor strip, whereas the extrapyramidal tract drives involuntary emotional expressions and originates in subcortical areas of the brain. When individuals are in intensely emotional situations but need to control their expressions they activate both systems, which engage in a neural "tug of war" over control of the face, allowing for the quick, fleeting leakage of microexpressions. Face masks may increase the difficulty in recognizing microexpressions, which may be significantly detrimental in certain situations like evaluation of a depressed patient with suicidal ideations where cues from microexpressions may help the clinician to decide a course of action. Face masks may also affect the recognition and reflection of empathy. Empathy is the competence of a physician to understand the patient's situation, perspective, and feelings; to communicate that understanding and check its accuracy; and to act on that understanding in a helpful therapeutic way. It has an affective, a cognitive, and a behavioral dimension. Within the consultation, patient's perception of psychiatrist's empathy has been shown to be essential in developing trust, communication and a therapeutic alliance. Empathy is related to numerous positive outcomes including increased patient satisfaction, good patient rapport, increased adherence to treatment, increased diagnostic accuracy, reduced medical errors, and positive health outcomes (Derksen et al., 2013; West et al., 2006). When psychiatrists wear a facemask during consultations, this has a significant negative impact on the patient's perceived empathy and the positive effects of relational continuity is diminished (Wong et al., 2013).

Behavioral mimicry may be part of a person's repertoire of behaviors, used non-consciously, when there is a desire to create rapport. Unconsciously mimicking others' behavior, postures, and voice tones helps us feel what others are feeling. In short, mimicry is a part of empathy. Mimicry can produce a diffuse prosocial orientation which may help in strengthening social bonds in many situations. However, face masks may impede in such non-conscious mimicry.

Face masks affects the speech intelligibility, which is the perceived quality of sound transmission (Palmiero et al., 2016). Affective prosody, a neuropsychological function, which encompasses all nonverbal aspects of language that are necessary for recognizing and conveying emotions in communication, is impaired in psychiatric patients. In depression, analysis of vocal prosody could be a powerful tool to assist in depression screening and monitoring over the course of depressive disorder and its recovery. Hence, it may lead to failure in the part of physician to undermine depressive symptoms or even diagnose it. Patients suffering from schizophrenia perform poorly in different aspects of affective prosody like spontaneous prosody, prosodic recognition, prosodic repetition, and facial affect recognition. When concerns of the patients are heard and respected, it encourages them to voice their feelings and concerns. However, if the patient is requested to repeat what is said, or he/she is unclear about what the psychiatrist has said, then negative emotions like irritability, frustration and disappointment

may be generated or accentuated during the interview. Patients with specific disorders like depression are likely to appraise such interactions more negatively due to their cognitive biases. On the other hand, not being able to understand the concerns of the patients effectively may result in a sense of incompetence in the psychiatrist. This may disrupt the building of rapport resulting in patient dropout. The quality of psychiatrist-patient relationship has repeatedly been proposed as the most important factor for engaging patients in treatment and in facilitating positive outcomes, which may be adversely affected by the face mask. Efforts are thus required to make more compensatory efforts to improve communication and rapport building despite the face masks to improve the patient outcomes.

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## **Declaration of Competing Interest**

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#### References

- Derksen, F., Bensing, J., Lagro-Janssen, A., 2013. Effectiveness of empathy in general practice: a systematic review. Br. J. Gen. Pract. 63 (606), e76. https://doi.org/ 10.3399/bjgp13X660814.
- Ekman, P., 2003. Emotions Revealed Recognizing Faces and Feelings to Improve Communication and Emotional Life. Henry Holt and Co, New York.
- Ellis, H.D., Jeeves, M., Newcombe, F., Young, A., 1986. Aspects of Face Processing, vol 28. Springer Science & Business Media, Berlin.
- Mancini, G., Agnoli, S., Baldaro, B., Ricci Bitti, P.E., Surcinelli, P., 2013. Facial expressions of emotions: recognition accuracy and affective reactions during late childhood. J. Psychol. Interdiscip Appl. 147 (6), 599–617. https://doi.org/10.1080/00223980.2012.727891.
- Palmiero, A.J., Symons, D., Morgan, J.W., Shaffer, R.E., 2016. Speech intelligibility assessment of protective facemasks and air-purifying respirators. J. Occup Environ. Hyg. 13 (12), 960–968. https://doi.org/10.1080/15459624.2016.1200723.
- Tandon, R., 2020a. The COVID-19 pandemic, personal reflections on editorial responsibility. Asian J. Psychiatry. 50, 102100. https://doi.org/10.1016/j.ajp.2020.102100.
- Tandon, R., 2020b. COVID-19 and mental health: preserving humanity, maintaining sanity, and promoting health. Asian J. Psychiatry. 51, 102256. https://doi.org/ 10.1016/j.ajp.2020.102256.
- West, C.P., Huschka, M.M., Novotny, P.J., Sloan, J.A., Kolars, J.C., Habermann, T.M., Shanafelt, T.D., 2006. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. J. Am. Med. Assoc. 296 (9), 1071–1078. https://doi.org/10.1001/jama.296.9.1071.
- Wong, C.K., Yip, B.H., Mercer, S., Griffiths, S., Kung, K., Wong, M.C., Chor, J., Wong, S. Y., 2013. Effect of facemasks on empathy and relational continuity: a randomised controlled trial in primary care. BMC Fam Pract. 14, 200. https://doi.org/10.1186/1471-2296-14-200.

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