

Discussion

“I’m smiling back at you”: Exploring the impact of mask wearing on communication in healthcare

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Abstract

Background: Surgical and respirator masks are worn to reduce the risk of droplet and airborne transmission of viral respiratory disease. As a result of the novel coronavirus (COVID-19) pandemic, mask wearing has been designated mandatory for healthcare professionals working in UK hospitals for the foreseeable future. It is thus timely to consider the long-term implications of mask wearing on communication within healthcare settings, from both a patient and a clinician perspective.

Aims: The primary objective is to identify research evidence that corresponds to the mask-wearing experiences of healthcare professionals working on the ground. By drawing together a summary of the literature illustrating the potential challenges associated with mask wearing, it is possible to make an application to various clinical cohorts and to formulate a set of preliminary, evidence-based support strategies. The paper additionally explores the role for the Speech and Language Therapist (SLT) in supporting communication in the context of mask wearing.

Methods & Procedures: Through a scoping review of the relevant literature, this paper reflects holistically on the prospective challenges associated with mask wearing across a variety of healthcare settings and patient populations. The subsequent conclusions have been used to inform the proposed clinical guidelines for safe and effective practice.

Outcomes & Results: There is a current research gap with regards to mask wearing in non-medical and non-clinical healthcare workers, and the impact this may have on both a professional and a personal basis. In the absence of preliminary data, the development of associated communication support strategies is hindered. This paper draws upon a variety of clinically conceivable issues faced by healthcare professionals, outlines important practical and ethical considerations, and proposes evidence-based solutions to some of the challenges identified. Future research is required to gather evidence with regards to actual clinical experiences of mask wearing to substantiate hypotheses.

Conclusions & Implications: Although undoubtedly essential in protecting the health of staff and patients, there are numerous logistical, physiological, psychological, social and economic complications associated with the wearing of masks. The ability of healthcare staff to successfully communicate with patients and with colleagues is jeopardized, which may adversely affect the efficiency, effectiveness, equitability and, most notably, safety of therapeutic intervention. The SLT has a distinct role in facilitating communication in order to safeguard the provision, accessibility and efficacy of services.

Keywords: Allied Health Professionals, brain injury, interaction, psychosocial, Speech and Language Therapy, practice.

What this paper adds

What is already known on the subject

- Existing research explores the impact of mask wearing on medical doctors, surgeons and dentists, and upon the corresponding patient cohorts. Little is known about how mask wearing may affect Allied Health Professionals and their ability to deliver therapeutic interventions safely and effectively. With mandatory

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face covering potentially a long-term requirement for UK healthcare staff, it is both timely and relevant to consider the consequences of mask wearing on communication across acute and community settings.

What this paper adds to existing knowledge

- This paper identifies a range of prospective key issues associated with mask wearing across a variety of clinical and non-clinical populations, with application specifically to vulnerable patient cohorts. Through evidence synthesis, this paper provides a summary of fundamental issues supported by relevant literature, and draws upon these in order to propose a preliminary set of evidence-based clinical guidelines setting out potential solutions to the challenges faced. This review additionally assists in quantifying the role of the SLT within these extraordinary circumstances, with the aim of prompting unified practice, building upon professional guidance and increasing skill recognition.

What are the potential or actual clinical implications of this work?

- In addition to their role in facilitating the development of individualised communication strategies for patients, SLTs should actively seek to provide widely accessible multidisciplinary education opportunities focusing on supporting communication; with specific reference to mask wearing and the associated communicative challenges. At a commissioning and managerial level, leaders within healthcare should acknowledge mask wearing as just one of the complexities associated with frontline working in the context of the COVID-19 pandemic, and aim to support their workforce by delivering resources and protocols which maximize and promote staff safety, efficiency, resilience and well-being in concurrence with positive patient outcomes.

Introduction

On 15 June 2020, novel government policy came into effect in the UK stipulating that all staff working in National Health Service (NHS) hospitals are required to wear Type 1 or 2 surgical masks with the aim of reducing the risk of novel coronavirus (COVID-19) transmission (Department of Health and Social Care 2020). This followed a systematic review by the Scientific Advisory Group for Emergencies (SAGE) which indicated that face coverings can indeed aid in reducing onward transmission of viral contaminants by asymptomatic and pre-symptomatic wearers, a cohort responsible for a significant proportion of the spread of COVID-19 (SAGE 2020).

A standard Type 1 or 2 surgical mask; also known as a fluid-resistant surgical mask (FRSM), has a bacterial filtration efficiency (BFE) $\geq 95\%$ (The Clinical Excellence Committee 2020). When appropriately covering the nose and mouth of the wearer, the risk of macroscopic droplet or airborne transmission originating from the wearer is reduced, although not eliminated (Greenhalgh *et al.* 2020). Respirator masks, also known as a filtering face pieces (FFP), have a BFE between $\geq 94\%$ (FFP2) and $> 99\%$ (FFP3) (The Clinical Excellence Commission 2020). A respirator mask, when fitted and worn correctly, reduces the risk of the wearer inhaling sub-micrometre airborne contaminants evoked by aerosol-generating procedures (AGPs).

The COVID-19 pandemic has led to the introduction of routine surgical and respirator mask use across a

range of healthcare professions for whom this is typically uncharacteristic, including allied health professionals, nursing and administrative staff. Whilst the wearing of masks is undeniably vital in reducing the risk of outbreaks of viral respiratory illness, staff on the ground have noted subsequent repercussions with regards to the feasible application of therapeutic interventions, the patency of patient–clinician relationships and the well-being and resilience of both patients and staff.

Patient Impact

In covering a significant proportion of the face, masks could pose a substantial psychological barrier to the development of therapeutic relationships (Seale *et al.* 2014). When combined with the additional personal protective equipment (PPE) often required in order to safely administer treatment, such as visors, hairnets and gowns, one clinician becomes visually indistinguishable from the next. Research indicates that longitudinal care affects the closeness of the patient–clinician relationship, with regularity rather than frequency being the most important factor in the development and maintenance of trust and regard (Ridd *et al.* 2009). Positive patient–clinician relationships have been found to favourably influence the health behaviours of patients (Berry *et al.* 2008) with consequent implications with regards to compliance with interventions and thus clinical outcomes. In patients with cognitive impairments, for example, the acquired brain injury population

where prosopagnosia and other types of facial recognition deficit are already common (Valentine *et al.* 2006), the wearing of face masks may pose a further obstruction to visual recognition for a proportion of the patient cohort. A lack of perceived consistency in patient–clinician interactions may ultimately diminish the positive effects of relational continuity (Wong *et al.* 2013). In addition to visually homogenizing the wide range of professional roles present within the ward environment which could result in considerable confusion in itself, the continual inability to recognize a clinician may impact upon the extent to which rapport is developed. For the clinical population who struggle to differentiate between clinicians and experience disorientation as a result, this relentless lack of familiarity and personal connection can evoke feelings of loneliness and isolation, in addition to formal diagnoses of depression and anxiety (Alsawy *et al.* 2020). Therapeutic engagement could be inhibited as a consequence of the aforementioned endemic discomfort, threatening the productivity and authenticity of the collaborative exchanges required for shared decision-making in patient-centred care. There is, however, contrary evidence, particularly within the field of dentistry, to suggest that patients may actually show preference towards staff who don masks. Research indicates that this practice is perceived by some patients to be directly associated with adherence to infection-control procedures (Shulmand and Brehm 2001) and thus advantageous to their own personal safety. In patients with an informed understanding of the rationale for face covering in the context of the COVID-19 pandemic, mask wearing may indeed enhance trust, respect and regard within patient–clinician relationships and impact positively upon levels of engagement. Irrespective of individual patient ability, views or preferences, a collective effort should be made to facilitate the recognition of individual clinicians as a foundation upon which to build positive and productive therapeutic relationships.

Effective communication is a central necessity in building therapeutic relationships, with functional professional relationships a prerequisite in the delivery of high-quality care (Ha and Longnecker 2010). The wearing of masks creates, at base level, a physical barrier to effective communication. Goldin *et al.* (2020) found that medical-grade masks act as a low-pass acoustic filter for speech and can attenuate high frequencies by 3–4 dB when a surgical mask is worn, and up to 12 dB with respirator mask use. This represents an enormous degradation in the acoustic signal which, coupled with the already challenging ambient noise levels often experienced within healthcare settings, may generate supplementary physiological and psychological stress directly associated with the listening environment. For patients with a cognitive, communication or hearing impair-

ment, a furthermore reduced ability to hear, attend to or process auditory stimuli may lead to frustration and miscommunication. It is thus vital that clinicians monitor, manage and adapt the clinical environment to support all patients to engage with rehabilitation to the best of their ability.

Covering the mouth additionally eliminates the possibility of using lip-reading cues to support understanding, which are particularly valuable in substantiating the acoustic signals required for auditory comprehension in patients with communication difficulties (Dupuis 2011). Although efforts have been made to develop medical-grade masks with a transparent section to facilitate lip reading, designs have not yet met infection prevention and control requirements for clinical use in the UK. Another solution to this problem—powered hood respirators—are a highly expensive alternative and are in limited supply in the UK. In the absence of lip reading, neural processing of auditory speech signals is slowed to the detriment of speech perception in both normal-hearing and clinical populations (Van Wassenhove *et al.* 2005). The consequent melee of ambiguous acoustic signals requires protracted, effortful interpretation even in the non-clinical population, meaning that for those with cognitive, communication or hearing impairments, this can present an intolerable task. Under these circumstances, clinical staff are using technology in innovative ways to compensate for auditory–visual incongruence. Live transcription applications compatible with mobile telephone and tablet devices are being employed for healthcare purposes to provide bimodal presentation of information, with highly positive patient responses. At this time, it is vital that staff are encouraged to employ a flexible, creative, resourceful approach to communicative problem-solving, including the exploration of novel technologies.

Further miscommunication may stem from patient reluctance to request clarification in the face of incomprehensibility. Pamungkasih *et al.* (2019) found that in situations where patients were unable to hear or interpret information provided by a clinician, patients were inclined to ‘make a guess’ as to the topic or nature of discussion. Theoretically, in the case that all practicable steps are not taken in order to ensure that a patient has access to all relevant information for decision-making in the context of healthcare, transparency and candour are compromised and a patient’s fundamental human right to health and autonomy is contested. A lack of comprehensible information may have a direct impact upon the patient’s ability to become actively involved in their own healthcare, to make informed capacitous decisions and to give consent. Furthermore, subsequent information gathered by clinicians may as such be incomplete, which could result in clinical inaccuracies (Pamungkasih *et al.* 2019) and directly compromise

patient safety. Therefore, clinicians have a responsibility to recognize and reflect upon these challenges, and to actively adjust their own practices in order to compensate for such communicative complications. Allocating time for questions and encouraging associated discourse is important in establishing trust and promoting openness and honesty in patient–clinician consultations, leading to more comprehensive information gathering, well-informed interventions and thus improved outcomes.

It is widely appreciated that when wearing a medical-grade face mask, the volume and intelligibility of speech is compromised. What is lesser considered is the potential impact upon other infection-control measures. Reduced speech volume presents its own transmission risk in that the patient or clinician may counterproductively move closer to the speaker (Lazzarino *et al.* 2020). As such, the protective element of social distancing becomes void. In order to improve intelligibility without altering physical proximity, the clinician must increase their volume which, in turn, can threaten patient confidentiality. When raising the voice to compensate for source attenuation, clinicians should ensure that additional measures are in place to maximize patient comfort and maintain privacy and dignity; particularly in the case that they are discussing sensitive information such as diagnosis, prognosis or medications (Pamungkasih *et al.* 2019).

Covering the mouth also has a significant impact on non-verbal communication, namely the ability to infer sentiment from facial expression. Humans rely on expression cues displayed by the mouth to infer emotion; however, the extent to which the mouth is observed in proportion to the eyes varies dependent on a huge variety of components, including culture (Yuki *et al.* 2007). Patients seek comfort and reassurance from clinicians by interpreting their facial expressions and body language, using these non-verbal signals to determine the presence of empathy, warmth and genuineness in interactions (Sherer and Rogers 1980). Changes to normative non-verbal behaviours associated with a reduction in the range of facial expressions witnessed could have a profound influence on the patient's perception of clinician emotional intelligence and interpersonal skills. Patient observations of communicative competence may subsequently impact upon clinician likeability, which has been shown to affect overall patient satisfaction in the context of their healthcare as a whole (Conte *et al.* 1995), regardless of actual treatment outcomes (Rezaief and Askari 2014). Research indicates that wearing a medical-grade mask during consultations can have a significant, negative impact on the level of empathy (Wong *et al.* 2013) and attentiveness (Rezaief and Askari 2014) that the clinician is perceived to express. In the referenced studies, patients highlighted that they felt their

views had been neglected as a result of reduced perceived responsiveness and also queried whether incomplete information had been provided by the clinician, both of which interpretations are highly concerning in the context of healthcare. In order to compensate for the reduction in non-verbal cues associated with mask wearing and the impact this has upon rapport-building, clinicians are required to transition from non-verbal to verbal communication where thoughts and feelings are overtly affirmed. This may render the nature of exchanges stilted or even insincere, which has a significant impact upon the naturalness of discourse within the clinical environment. However imperfect the proposed compensatory strategy, the importance of establishing and maintaining rapport remains paramount in fostering dynamic patient–clinician relationships and, as such, all justifiable measures to safeguard both verbal and non-verbal communicative effectiveness should be employed.

Communication breakdowns can result from the reduced ability to both hear and accurately interpret what the clinician is saying. A significant proportion of patients accessing healthcare services in the UK present with cognitive impairments which have a distinct impact on communication. With new evidence suggesting that over one-third of COVID-19 survivors may present with neurological symptoms (Mao *et al.* 2020), including voice, speech, language, communication and cognitive impairments (RCSLT 2020a), providing an accessible service for all patients is paramount. Cognitive and communication difficulties can have a profound impact on the patient's ability to express their basic health needs and to attend to, process and comprehend verbal information. Acquired communication difficulties are known to impact upon a person's ability to access healthcare services (RCSLT 2020b), which can result in poorer overall health, quality of life and socioeconomic outcomes (Kimonides *et al.* 2018). With communication and behaviour-related challenges likely to be intensified by mask wearing across some patient cohorts, the impact upon assessment, intervention and subsequent clinical outcomes is unknown. With the best possible clinical outcomes in mind, it is the responsibility of the speech and language therapist (SLT) to develop and circulate individualized, co-produced, professionally informed communication guidelines for all patients considered vulnerable to communicative challenges which may be exacerbated by mask wearing.

The definition of 'health' within the World Health Organisation's (WHO) (2020) constitution emphasizes the importance of well-being: 'health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Taking this classification into account, it is fundamental to consider the impact of mask wearing from a psychosocial

perspective. Well-being can be split into two categories: objective and subjective. In terms of objective (external) patient well-being, surgical masks are a positive adjunct to clinical practice. As discussed previously, masks may be perceived to be representative of health promotion through adherence to collective infection-control procedures. However, in relation to subjective (internal) patient well-being, it is conceivable that the presence of masks could be negatively construed. Research indicates that the surgical masks have been observed to symbolize 'risk', 'threat' and 'loss' (Neilson 2016) and can evoke feelings of distress amongst patients who do not have a clear understanding of the rationale for this practice. In considering the prior exposure of the general population to mask wearing, for example, through media outlets, it is possible that each individual may already have formerly established preconceptions which may influence their response to this conduct. Whether these are positive associations with the heroic surgeon saving a life in a hospital drama or an unsettling reminder of a masked protagonist in a horror film or reference to criminal culture, patient responses to this 'new normal' will undoubtedly vary. Pamungkasih *et al.* (2019) found that the perception of reasons for mask wearing varies according to the background and characteristics of patients. In this study, patients with lower levels of education misinterpreted mask wearing to be associated with preventing odour, thus resulting in self-consciousness and embarrassment. For patients with cognitive or communication difficulties, the ability to comprehend the complex clinical reasoning behind mask wearing and to retain this information may be restricted. Consequent outcomes may range from health anxiety to antagonism to disorientation, all of which are enormously counterproductive with regards to focusing intervention and developing therapeutic relationships. In order to avoid misconceptions associated with mask wearing, clinicians should ensure that all patients are provided with an adequate explanation with regards to this practice in a modality and at a frequency which support comprehension and memory.

Staff Impact

Communication with patients is an art (Ha and Longnecker 2010) and it is well documented that a positive therapeutic relationship is key for service engagement and patient satisfaction (Danzl *et al.* 2012). Skilful patient-clinician communication and constructive interactions are essential in order to develop rapport and encourage co-production in goal planning and intervention. To compensate for the effects of mask wearing, the clinician must now devote more time and effort than ever to establishing effective channels of communication. Research shows that clinicians consider mask use

to be symbolic of erecting 'barriers' between themselves and their patients and associate their use with inferior patient relationships, which impact upon their ability to provide gold standard care (Seale *et al.* 2014). It is conceivable that the sense of accomplishment for clinicians, and thus job satisfaction, may be compromised as a result. Within clinical research studies staff have expressed reservations associated with the way in which patients may interpret mask wearing, with some staff concerned that patients may be made to feel 'like lepers' (Seale *et al.* 2014). These intrinsic and extrinsic ethical conundrums have the propensity to plague clinicians on a daily basis. It is thus vital to ensure that teams foster open dialogues for peer-support purposes, as well as have timely access to relevant psychological support if required.

From a practical perspective, face covering has had a significant bearing upon the feasibility of using standardized assessments and delivering specific clinical interventions. Arguably, the effects of mask wearing have had the most extensive implications for SLT interventions, where the ability to observe the mouth and face of the clinician is often fundamental. Questions are raised as to the validity of standardized cognitive and communication assessments carried out whilst the assessor is wearing a mask as a consequence of the reduced clarity of the auditory stimuli presented. On the contrary, however, the adjunct of mask wearing may indeed be beneficial in supporting clinicians to 'prevent lip reading' as is stipulated within assessments of auditory phonological analysis such as the Psycholinguistic Assessments of Language Processing in Aphasia (PALPA): tests 1–5 (Kay *et al.* 1992). SLTs who would typically rely on oro-motor and articulatory modelling, to assess cranial nerve function on dysphagia assessment and to treat acquired neurological speech disorders such as dysarthria and apraxia, have been stripped of their archetypal toolkit. In the face of this challenge, clinicians have been obligated to swiftly devise modified interventions, for example, the use of pre-recorded demonstrative videos depicting the full face. When working with a caseload where cognitive impairment is common, the introduction of an additional on-screen or pictorial stimulus may or may not be viable. When an alternative therapeutic format is not practicable, the clinician's ability to deliver the relevant intervention is compromised. Whether this will have a perceptible impact upon clinical outcomes is yet to be determined; however, is it conceivable to predict that in the case that an intervention is provided suboptimally or is indeed absent, patient gains may be decelerated. For the clinician this presents further ethical concerns, where patient health is vulnerable both in the absence of a mask and as a consequence of the delay in appropriate rehabilitation.

At a social–emotional level, clinicians rely on non-verbal cues emanating from the face in order to convey meaning and sentiment. Facial expression and body language are used as a tool to designate reassurance, affirmation and empathy in order to establish trust and rapport between patient and clinician. With the face partially covered, clinicians are challenged to find innovative ways of engaging with patients in order to build the robust connections required for successful clinical outcomes. With the range of non-verbal cues one can employ to add depth to their communication diminished by mask wearing, further importance is placed upon the language and intonation used by clinicians. The recurrent need for meticulously word complex, sensitive information which may easily be misconstrued in the absence of non-verbal cues could feasibly result in clinician anxiety and burden. This could theoretically elicit cumulative avoidance behaviours and impact upon the safety and equitability of care. As such, it is crucial that this load is shared equally amongst clinicians.

The quality, tone and volume of our voice is also key in communicating our own emotions. The accurate interpretation of vocal affect cues is critical when facial cues are absent or ambiguous, with a reliance on these cues only increased by the adjunct on mask wearing. Evidence indicates that listeners can discriminate expressions secondary to prosodic manipulation associated with facial movement, with acoustic cues even going as far as to support the differentiation of smile types (Auberge and Cathiard 2003). However, it is highly characteristic for those with cognitive impairments to present with deficits in vocal affect recognition (Spell and Frank 2000), which proffers an additional challenge when face covering is added to the mix. Clinician intonation may be deprioritized in order to maintain adequate volume levels and, as such, provide conflicting signals with regards to the nature of the interaction. All staff must pay consistent attention to their non-verbal communication skills, which can be challenging in the context of complex, multifaceted interventions and demanding workloads and environments.

A key characteristic of communicative signals is that, first, the communicator is aware that they are sending a signal and, second, that this signal is being observed by a conversation partner (Frith 2009). When we lack feedback to support us in determining the viability of the signals we send out, we encounter considerable difficulties in sending them. Clinicians report that surgical masks ‘muffle’ their voices (Seale *et al.* 2014) and are aware that they prevent patients from lip reading; however, the extent to which this affects message transmission will vary substantially depending on the conversation partner and the environment. Consequently, a blanket approach to communica-

tion support across all clinical caseloads is unfeasible. Whether communication is for the purpose of giving instructions, asking questions or eliciting complex discussions, clear two-way communication is key in order to minimize patient distress, reduce the risk of harm (Sutcliffe *et al.* 2004) and promote patient-centred care. The same principles can be applied when discussing communication within professional relationships. Working within any healthcare setting relies on successful inter- and intra-professional liaison, which is similarly challenged by mask wearing. Collaborative working has been observed to foster improved patient outcomes and is fuelled by the establishment of strong team relationships (Marshall Brooks *et al.* 2020). Positive workplace dynamics have also been recognized as a protective factor for staff resilience (Taku 2013). With communication between clinicians impeded by mask wearing, the productivity, efficacy and morale of the workforce could theoretically be adversely affected. Conversely, these challenging circumstances may foster a sense of camaraderie, with clinicians united by the shared purpose of overcoming obstacles to continue to provide gold standard care. Regardless of whether initial experiences have been positive or negative, it is key that clinicians place equal importance on developing inter-professional communication strategies for the purpose of nurturing multidisciplinary relationships, developing collective resilience and maintaining morale.

The great majority of healthcare professionals can be categorized as ‘Professional Voice Users’, as defined by Salatoff (2001), ‘any person whose ability to earn a living is impacted negatively by loss of vocal quality and endurance’. Even before the adjunct of mandatory mask wearing and the associated impact on the voice, working as a healthcare professional was found to correlate with a high risk of voice disorder (Titze *et al.* 1997). With the adjunct of mandatory mask wearing, the reduced patency of acoustic cues prompts clinicians to forcibly raise their voice both consciously and unconsciously; perhaps proportional to a novel variant of the Lombard effect. In ensuring that patients have heard and understood them and in the interests of safety, clinicians are at risk of employing hyperfunctional vocal techniques: the likelihood of this only exacerbated by mask wearing. Within the cohort of professional voice users, common symptoms include odynophonia, xerostomia, laryngopharyngeal reflux, muscle tension, fibrovascular vocal fold lesions (e.g., nodules and polyps), cysts, vocal fold scarring, changes in vocal fold mobility, vocal fold haemorrhage and laryngitis (Franco and Andrus 2007, Przysieszny and Przysieszny 2015). Work-related voice disorder has an impact on both social and professional identity and is frequently listed as a reason for prolonged work absenteeism (Przysieszny and Przysieszny 2015). This necessitates a proactive,

preventative approach to collective vocal hygiene and voice use, most appropriately coordinated by the SLT.

With an already diminished workforce due to COVID-19-related sickness (British Society of Rehabilitation Medicine 2020), further depletion of the workforce would have a hugely detrimental impact upon the health service from an economic perspective. In addition to the potential increase in the incidence of voice disorder, the lack of formal training with regards to surgical mask and respirator use is likely to increase the risk of viral respiratory disease subsequent to clinician incompetency (Chughtai *et al.* 2020). When worn in accordance with recommendations, masks have been found to result in eye irritation, breathing difficulties, heat discomfort and claustrophobia in wearers (Seale *et al.* 2014, Lazzarino *et al.* 2020). There are also practical and logistical issues associated with mask wearing, for example, the fogging up of spectacles. The aforementioned risks present a practical and ethical dilemma, where the importance of mask wearing is acknowledged simultaneously with potential detriment to personal health and safety at work. As such, it should be recognized that long-term mask use is likely to have some impact upon the health and well-being of staff, in addition to their clinical productivity and capability. From a more holistic perspective, recent research has demonstrated the magnitude of the psychological impact that working during the COVID-19 pandemic has had upon clinical staff. Frontline clinical working has been found to correlate with statistically significant levels of fear, anxiety and depression, in addition to the development of serious psychiatric illness in a small proportion of this population (Lu *et al.* 2020). It is therefore imperative that staff physical and mental health is promoted and prioritized, with steps proactively taken to protect the well-being of frontline clinicians both now and in the future.

Role of the Speech and Language Therapist

As a consequence of the COVID-19 pandemic, healthcare services are likely to experience an influx in the number of patients with a range of physical, cognitive and mental health support needs. This is anticipated to have a highly significant impact on neurological rehabilitation services which will accrue larger, higher complexity caseloads (British Society of Rehabilitation Medicine 2020). The SLT has a vital role in supporting patients with cognitive and communication difficulties to access interventions provided by other members of the clinical team (RCSLT 2020b), thus facilitating inclusive, equitable multidisciplinary interventions. The SLT also plays a significant role in supporting informed decision-making in the context of medicolegal mental capacity assessment (RCSLT 2020a). Through holistic

assessment and evaluation, the SLT will develop and deliver strategies to overcome ongoing barriers to communication in order to facilitate the delivery of key interventions and to support collaborative care planning. SLTs are skilled in the training and development of the wider team and should draw upon their expert skills to actively educate the multidisciplinary team on effective interdisciplinary and patient–clinician communication. In addition to the conventional SLT role in supporting patient–clinician communication, the current circumstances necessitate novel consultation practices at an inter-professional level. Taking into account the aforementioned issues surrounding mask wearing, the SLT has a unique obligation to educate and inform staff with regards to vocal hygiene and voice use, and to signpost the clinical team to appropriate services for timely access to relevant intervention if required.

Guidelines for practice within healthcare

There is no doubt that for the safety of both staff and patients, the use of medical-grade masks is essential and unavoidable in the context of the COVID-19 pandemic. However, it is also crucial to be mindful of the impact this may have upon communication and well-being. In order to move forwards, it is essential to consider ways in which to maintain the well-being, engagement and satisfaction of both patients and staff. In view of the relevant literature and the experiences of both clinical and non-clinical staff on the frontline, the following guidelines have been developed with the aim of maximizing communicative success and well-being.

Recommendations for communicating with patients

- *Consider the communicative environment:* Staff should aim to minimize noise and distractions in the surrounding area or move the conversation to a more appropriate location if this is not possible.
- *Introductions are key:* Staff should introduce themselves at the beginning of each interaction and give a comprehensive yet concise summary with regards to their role and the intervention they plan to administer.
- *Establish personal connections:* If practicable, the patient should be shown a visual image of the staff member without their mask. The staff member may also choose to share a piece of personal information to prompt recognition in subsequent meetings.
- *Give explanations:* Staff should explain the reasons for which they are wearing the mask—the level of detail will vary according to the needs and abilities of each individual patient.

- *Provide reassurance*: Reassure the patient that they are safe, referring back to the rationale for mask wearing. It may or may not be appropriate for reassurance to be accompanied by statements of orientation, again depending on the individual needs of the patient.
- *Encourage questions*: Ask the patient whether they have any questions and allocate additional time for answering these.
- *Acknowledge issues*: Verbally recognize the challenges associated with mask wearing; however, affirm the necessity of this action via reference to rationale and infection prevention and control protocol.
- *Communicate non-verbal information verbally*: Staff should give verbal feedback on non-verbal behaviours to reflect and portray emotion, for example: 'I'm smiling back at you.' Staff may choose to give verbal depictions of emotional responses which may typically be conveyed via facial expression, for example: 'I really empathise with the way you are feeling.'
- *Communicate verbal information non-verbally*: Additional emphasis should be placed on the use of gesture and body language, both to express sentiment and to support patient understanding. For example, gesture and modelling can support comprehension during transfers or personal care, and using hand gestures such as thumbs up and thumbs down can be used to clarify whether information has been adequately understood.
- *Use written support*: Using visually accessible forms of communication such as flashcards, whiteboards, notepads and information leaflets can be a useful way to present or reiterate information. This may or may not be appropriate for patients with cognitive or communication difficulties. The use alternative and augmentative communication (AAC) aids, for example, low-tech picture cards and Talking Mats, should be considered in these patient cohorts.
- *Use technology*: Clinicians should be prepared to employ technology in novel ways in the context of healthcare. This may include the use of live transcription, pre-recorded videos and specialist applications with specific clinical relevance.
- *Safeguard confidentiality*: Staff should be aware that they may be raising their voices to compensate for mask wearing. As such, extra care should be taken to ensure that the communicative environment is appropriate for the genre of conversation taking place.
- *Be creative*: Staff should not be afraid to use a trial-and-error approach to develop novel strategies to support communication and establish connec-

tions. Staff should be confident in sharing techniques that have been effective with the multidisciplinary team.

- *Consult the SLT*: SLTs possess extensive clinical expert knowledge with regards to all aspects of communication and can assist both patients and staff to develop personalized communication support strategies based on the needs of each individual.

Recommendations for staff health and well-being

- *Practise good vocal hygiene* (see the recommendations of the British Voice Association 2020): Clinicians may initially wish to consult the resident SLT in the case of general questions or concerns; however, they should seek referral to the local specialist voice service via the general practitioner in the case that formal assessment and intervention are required.
- *Develop physiological awareness*: Should clinicians experience adverse physical symptoms associated with mask wearing (1) in the short term: a break should be taken where masks can be removed in a designated safe space; and (2) in the long term: the clinician should discuss this with their general practitioner and occupational health department if indicated.
- *Develop psychological awareness*: Should clinicians experience adverse psychological symptoms associated with mask wearing (1) in the short term: clinicians should seek peer support, including liaison with the resident clinical psychologist if practicable; and (2) in the long term: the clinician should discuss concerns with their general practitioner and occupational health department if indicated.
- *Seek timely professional support*: In the case that a staff member has concerns regarding their physical or mental health, they should contact their general practitioner as a matter of urgency.
- *Actively maintain multidisciplinary morale*: With team dynamics arguably more important than ever, clinicians should actively prioritize collective well-being. This may take a variety of forms dependant on the nature of the workplace.

Conclusions

The wearing of medical-grade face masks protects clinicians and their patients by reducing the risk of transmission of viral respiratory disease and is crucial in the context of the COVID-19 pandemic. Despite associated complexities, it is essential that clinicians are fully compliant with Public Health England and

Trust-specific COVID-19 PPE policies in order to safeguard the health of themselves and others. It is, however, important to be mindful of the impact that mask wearing has upon both patients and staff, particularly with regards to their ability to communicate effectively. It should be recognized that the wearing of surgical and respirator masks could have a highly detrimental impact upon communicative success both inter-professionally and within patient–clinician interactions, with a plethora of undesirable consequences. As such, it is crucial that an evidence base reflective of frontline experiences of mask wearing is established upon which pertinent, well-informed and environment-specific communicative support strategies can be developed.

The SLT should play a principal advisory role in cultivating and disseminating individualized communication support strategies based on their clinical observations, with a novel educative and consultatory role necessitated in the context of mask wearing. In addition to advising on total communication strategies for patients known to have cognitive or communication difficulties, SLTs should be prepared to undertake an increasingly expansive role incorporating consultation relating to communication support for patients outside of their clinical caseload. SLTs should also assume an active role in the education of colleagues in order to enhance professional communication skills and to provide information related to vocal hygiene and proficient voice use.

In considering healthcare from a holistic perspective, taking into account the well-being of patients and staff alike, there are additional mask-wearing implications to consider. Research substantiates links between the wearing of masks and reductions in patient safety and well-being, which could explicably impact upon overall clinical outcomes. Beyond the impairment level, poorer outcomes could have a longstanding impact upon the quality of life and social participation of patients treated by masked clinicians. Clinician well-being, both physiological and psychological, is also affected. As a consequence, more frequent and long-term staff absenteeism may be observed over future months and years. With this in mind, the impact of face covering on both patient and clinician well-being could have a significant economic impact upon healthcare systems across the globe. As such, robust measures should be put in place in order to maximize the welfare of staff and patients in the UK in order to safeguard the NHS. The implications of mask wearing on communication in healthcare are yet to be formally observed in practice, and as such associated research detailing frontline clinical observations will be beneficial in facilitating the development of further targeted professional guidelines.

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