work increase the risk of needle-stick injury. If the rule is that no risk to the provider is acceptable, regardless of the benefit to the patient, very few interventions in the field would be possible.

In fact, the greatest life-threatening occupational hazard for paramedics is trauma from motor vehicle crashes. If the approach suggested by Verbeek and associates were extended to transportation risks, paramedics would never exceed posted speed limits, would never proceed through a red light and might not venture out on a dark, snowy night at all.

The authors’ analysis does a disservice to the brave men and women, dedicated professionals all, that I have encountered in this discipline.

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Reference

The recommendation of Richard Verbeek and associates1 that paramedics not intubate patients with SARS-like symptoms in the prehospital setting and that such patients be transported to the nearest emergency department derives from the flawed premise that all situations necessitating definitive airway management are identical in terms of the level of inherent threat to paramedics. This is not the case.

Part of the preparation for performing any endotracheal intubation in the field is a risk–benefit assessment of the procedure in that instance. The paramedic must determine whether the patient is likely to benefit from the procedure, whether the patient is likely to suffer an adverse outcome without it and whether performing the procedure in the field poses an unacceptable risk to paramedics and others.

The difficulty posed by SARS is that the risk of disease transmission during endotracheal intubation seems high, yet it cannot be quantified, and reports of widespread vector transmission with respiratory disease is to be placed in isolation and that no ventilatory assistance is to be attempted until a “protected team” using PPS is available.2

A recent email survey of Toronto paramedics, the foundation of my report, indicated that the “new normal” standard of PPE as used in hospitals fails to protect paramedics in their unique work environment. In fact, PPE is frequently had to be removed because of dangerous fogging and severe shortness of breath.

Should paramedics discontinue all interventions involving respiratory assistance? The seemingly obvious conclusion is that paramedics need better head and face protection, which should, at the very least, decrease vision problems, aid in heat dissipation and not impede breathing. The only type of product with these attributes is a PPS.

I have undertaken a field trial of a powered helmet-style PPS with a disposable hood (FreedomAir PPS, ViaSys Healthcare, Stackhouse Division, Wheeling, Ill. [www.corpakmedsystems.com/products/stackhouse/helmet.htm], distributed in Canada by Summit Technologies; the cost of helmet, fan and battery is just under $1000, and the disposable mini-togas cost $250 for 12). The helmet, mini-toga and battery can be easily carried by a paramedic at all times. During normal intubations the helmet is used with a face shield and an N95 mask, but without the filtering toga. In high-risk situations the mini-toga hood is doffed to offer better protection (99.9% viral filtration) and improved visibility; it is also cooler than the Tyvek hoods supplied as standard PPE.

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As the author of an unpublished report on personal protective equipment (PPE, consisting of double gowns, double gloves, Tyvek hood, N95 mask, goggles and face shield for airway management of a possible SARS patient) prepared for the Sunnybrook Paramedic Program Committee, I was asked by Richard Verbeek to comment on the CMAJ commentary1 recommending that paramedics not intubate patients with SARS-like symptoms, with or without a personal protective system (also known as a positive-pressure system or PPS; described in Appendix A of an Ontario Ministry of Health directive).2

Verbeek and associates1 conclude that paramedics should provide ventilatory support by using a bag valve mask (BVM) rather than intubation. I assert that it is not possible to consistently maintain a BVM seal in the prehospital environment. Consequently, neither intubation nor BVM ventilation is safe when performed by people using standard PPE. A ministry of health directive to Ontario hospitals states that a patient with a suspected communicable
When the disposable mini-toga is used in conjunction with standard PPE, the donning, removal and disposal procedures each take approximately 30 to 45 seconds (see video demonstration at www.cmaj.ca). Because a paramedic can remove the device without assistance before driving, there is no risk of contaminating the driver’s compartment and no reason for the paramedic’s partner to leave the intubated patient unattended.

In conclusion, the “new normal” PPE standards are inadequate in the prehospital setting. In certain situations a PPS is the only means of achieving the balance between patient care and paramedic safety.

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References

Revisiting Helsinki

Your editorial about the Helsinki Declaration was probably the first indication of unequivocal support from a developed country for the developing countries’ cry for justice, even if only (but hopefully just for the time being) in the arena of clinical trials.