Should you ventilate me if I get severe Covid19 pneumonia?

The numbers I use in this discussion are ballpark, off the top of my head figures and smarter people than me in the World Health Organisation can work out the more accurate estimates.

Imagine that next Saturday I am critically ill in Oban Hospital with severe Covid19 pneumonia.

Of course, the temptation for staff would be to ventilate me without question.

I believe I am respected and liked in our Hospital and staff might want to “Do everything” and “Have a Go” at saving my life.

But is that the wise action and could there be more harm than good come from ventilating me?

The current statistics are that of 5 patients ventilated for severe Covid19 pneumonia, 4 die and 1 is weaned off the ventilator.

The average time on a ventilator of those weaned is 14 days.

I write “weaned off a ventilator” because after 14 days the body will be very weak and the statistics for “survival to resume ordinary living” are simply not known.

We are used to Quality of Life Years Gained (QALY-G) calculations for clinical interventions to justify the cost of expensive medications or operations.

However, few clinical interventions have threatened the health and life of healthcare staff.

There is therefore now a Quality of Life Years Lost (QALY-L) to be subtracted from the QALY-G.

Whilst I was ventilated, for 14 days, there are important risks that staff would contract secondary Covid19 from me and suffer themselves and spread it to other patients, staff, family and friends.

One or more staff members might contract severe Covid19 whilst caring for me and in turn require ventilation with a probability of dying of 80% (4 ventilated patients die for each person weaned off a ventilator).

Roughly how would this work out?

It is clear from the evidence and recommendations from e.g. Australia that the process of intubation for ventilation is highly technical and in Covid19 there is a high risk of infection to staff.

The Australian recommendations are for two experts in intubation to be in the room supported by a full and fully trained team, with excellent kit, within an Intensive Care Unit (ICU).

In our Hospital we do not have an ICU. We occasionally ventilate patients after an operation prior to transfer to Glasgow.

We have one Anaesthetist on duty in the whole (small) hospital at any one time. We do not have the best kit, we do not have a full cohort of ICU trained nurses, we have not had the in-depth training.

Therefore, our Structure and Process is substandard for ventilation. We might be able to cope with 5 patients after a bus crash, but 5 patients laden with Covid19 is factors of ten more complicated and risky to staff.

Once I was ventilated, I would require a lot of clinical attention and attention to bodily functions.

I would need clinical review at least twice a day (two 12 hours shifts) by a Consultant Physician and Anaesthetist and by ‘my’ Nurse, so that is 6 staff donning full PPE just to review me. The nurse will be in and out administering intravenous medications, fluids, taking observations, attending to the ventilator circuit etc. When my bowels move into the bed at least 2 staff are going to have to come in to turn me, clean me, change the bed and

dispose of the soiled linen. During 24 hours I estimate 10 staff would have such clinically intimate proximity to me. There would be at least 10 other staff in the ward with indirect contact e.g. the nurse does not manage to doff the PPE properly and in a hurry does not quite clean her hands properly and virus gets onto the hands of another staff member.

During 14 days of ventilation there would be 140 episodes of staff having clinically intimate contact with me and another 140 episodes of indirect contacts.

I estimate that during those 14 days at least one staff member in the clinically intimate group would develop severe Covid19 infection, another 2 would develop milder infection and one in the indirect group.

If I survive to be weaned off the ventilator (1 chance in 5) it would be at the expense of 1 staff member with severe Covid19 and 3 others infected, who in turn could infect other staff, patients, and their own family and friends.

Now do the sums with a total of 5 patients ventilated, including me.

It looks to me that the subtraction of QALY-L from QALY-G leaves it clear that in Public Health terms it would be better for the future of the human race to provide me with plenty of morphine to alleviate the dreadful symptom of breathlessness as I die than to ventilate me with the associated QALY-L in staff.

Until someone can counter this argument with a convincing statistical, not emotional, case, I have stated that I am “Do Not Attempt Cardiopulmonary Resuscitation (DNACPR)” and “Do Not Intubate and Ventilate (DNIV)”.

I hope to be 64 years old in May 2020 and am in robust health. I take no prescribed medications. I do not smoke but drink more alcohol than the recommended limits.

I write this because as the worldwide population recovers from Covid19, it will need bright motivated compassionate well-trained healthcare staff.

The process of ventilation may be the most important and dangerous fomite for the current generation of healthcare staff.

By jumping to “Do It All” and “Have a Go” we may be shooting the human race in the foot, however well intentioned the motivation,

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