Nicotine replacement therapy for COVID-19 patients – a quality improvement project to reduce nosocomial COVID-19 infection

Authors: Florence Douglas[A] and Mark Shipley[B]

Introduction

At the beginning of the COVID-19 pandemic there was much publicity and anxiety around nosocomial COVID-19 infections.[1–3] While much has been written about preventing further transmission in hospitals,[4] one issue that we believe could also be tackled is that of patient–patient spread while smoking outside the hospital.

With the recent introduction of effective vaccines, there are more patients with 'incidental' COVID-19 who do not require oxygen and therefore are often able to leave the ward independently. Nicotine replacement therapy (NRT) has been shown to increase the chance of smoking cessation as well as treating nicotine addiction.[5] This may therefore encourage patients to remain isolated on inpatient wards. We suspected that NRT prescribing levels would be low and set out to improve this.

Materials and methods

The audit office at the Trust compiled a list of patients between March 2020 to April 2020 with COVID-19 and who were current smokers. Patients on intensive care units were excluded. Inpatient documentation and prescriptions were reviewed to see if NRT was discussed or prescribed.

A poster was created for the doctors' office of the two COVID-19 wards in November 2021 highlighting the importance of NRT prescription and an order set that was available on the e-prescription system.

In January 2022, a further review was undertaken. Initially this was planned to look at patients over a 2-month period, but this was completed early due to high numbers of patients.

Results and discussion

The initial review comprised 20 patients and the subsequent review comprised 41 patients – all of whom were inpatients with COVID-19 and current smokers.

The results showed that following the intervention, rates of prescribing NRT increased from 15% to 27%. There was also an increase in documentation about offering NRT – from 25% to 49%. These results show a modest increase, although overall disappointing levels of NRT prescribing.

These results reveal high levels of patients declining NRT prescription – the reason for this is not clear.

The second review revealed an increased proportion of patients with 'incidental' COVID-19 such as patients with fractures, overdoses or falls. These patients had low levels of NRT discussion and prescribing. The intervention, when designed, had not targeted doctors from non-medical specialties. Many of these patients are more mobile than patients with symptomatic COVID-19 and therefore these patients, in particular, should have NRT prescribed.

Another difficulty encountered in this project was the high turnover of medical doctors on COVID-19 wards due to reliance on locum doctors. Levels of NRT prescription varied greatly depending on which doctor had seen the patient.

Conclusion

Preventing nosocomial infections remains an issue for UK hospitals and increasing NRT prescription rates for COVID-19 patients could be a simple and low-cost initiative. A small intervention has led to some increase in NRT prescriptions by the medical team at our trust. The rise of 'incidental' COVID-19 infection has led to an increase in numbers of COVID-19 patients being seen by non-medical doctors and as such further intervention and education for non-medical teams is required. ■

References

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Authors: [A]South Tyneside and Sunderland NHS Foundation Trust, South Shields, UK; [B] job title