
Article:
Mitchell, C. orcid.org/0000-0002-4790-0095 (2019) Commentary on Grischott et al. (2019): Is the rising incidence of pulmonary disease among opioid-dependent patients an unintended consequence of inhalation of toxic substances? Addiction, 114 (5). pp. 877-878. ISSN 0965-2140

https://doi.org/10.1111/add.14606

Commentary on Grischott et al: 'Chronic obstructive pulmonary disease (COPD) among opioid dependent patients in agonist treatment. A diagnostic study.
Is the rising incidence of pulmonary disease amongst opioid-dependent patients an unintended consequence of inhalation of toxic substances?

Journal: *Addiction*

Date Submitted: 24-Feb-2019

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Keywords:

opiates, chronic obstructive pulmonary disease, primary care, multiple substances, service delivery

Commentary on Grischott et al:

Is the rising incidence of pulmonary disease amongst opioid-dependent patients an unintended consequence of inhalation of toxic substances?

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Abstract

Since the 1990s, there has been a shift from intravenous to inhaled use of illicit substances alongside a harm- minimisation policy change to promote 'safer' inhaled use. Interventions that legitimised this switch are of interest and may be linked to incident respiratory disease, a consequence which must now be addressed.

Commentary

Globally, there has been a significant shift from injected to inhaled heroin use since the 1990s[1]. In 2010, the UK Advisory Council on the Misuse of Drugs (ACMD), recommended legalisation of the provision of 'foil' as a harm reduction measure in drug treatment settings stating: 'The ACMD finds that there is evidence of the benefits of foil provision but can find no evidence of the dis-benefits'.[2] The ACMD further outlined the benefits of providing foil, which included a reduction in injecting behaviour and thereby an anticipated reduction in the risk of fatal overdose, blood borne virus (BBV) transmission, venous thromboembolism and 'litter'. More recently, in 2014, an international 'Public

Health and International Drug Policy' consensus monograph highlighted 'foil' intervention studies which enabled the (desirable) switch from injected to inhaled use.[3], [4]

Whilst the overall individual and public benefits of a reduction in injecting drug use are clear, the diagnostic studies undertaken by al and researchers in other settings raise important concerns about how policy makers and clinicians should respond to evidence of very high prevalence rates (up to 39%) of early-onset chronic obstructive pulmonary disease (COPD) in opioid dependent patients [5,6]. There is uncertainty about how the interplay of multiple inhaled substances (heroin, crack cocaine, cannabis and tobacco) and 'cutting' agents (eg talcum powder, baking soda), high temperature inhalation, the use of aluminium foil and also infection contribute to irreversible pathophysiological changes in the lungs [7,8]. The high prevalence of respiratory symptoms in the Grischott et al study sub-group who did not have COPD further suggests that the association between opioid and/or other substance use and respiratory symptom burden is complex.

Active case finding of COPD will add another co-morbid long-term condition to the significant biopsychosocial illness burden already experienced by opioid dependent individuals [9,10]. In line with screening programme imperatives, effective interventions must be offered to those who screen positive [11]. COPD guidelines recommend primary care as the core focus of management following diagnostic spirometry assessment, [12] while the most cost-effective interventions for COPD are influenza and pneumococcal vaccination, smoking cessation interventions, supported self-management and pulmonary rehabilitation [13]. These latter interventions mostly require sustained, active engagement, which does not sit well with the study group's preference for inhaled or oral pharmaceutical treatments, which may improve symptoms but do not influence prognosis. For those who do not access early diagnosis and early intervention, the prognosis of COPD is poor. It is characterised by significant disability (with loss of employment and a need for social care) and escalation in the use of urgent care, including unscheduled hospital admission [14],[15].

Therefore, the key question is: How should health and social care services be configured to address predicted respiratory health needs of the opioid dependent patient? Unfortunately screening for COPD in opioid dependent patients will not improve outcomes unless this population access proactive, timely healthcare. A failure to access primary care for physical co-morbidities and an over-reliance on the use of accident and emergency care is already reported in substance users [16]. This reliance on urgent care may arise from a number of factors including stigmatising behaviours by non-specialist healthcare practitioners, a chaotic lifestyle including unstable housing (and frequent changes of address), and a lack of co-located physical healthcare in most substance use treatment centres [17,18].

The authors sensibly suggest situating screening services and low intensity respiratory health interventions within the substance use clinic in order to optimise access to care. However, there are limitations in drawing this recommendation from a single centre study in Switzerland, a country which has made significant efforts to integrate public health, primary physical and specialist substance use care for this population who are vulnerable and at high risk of co-morbidities. Unfortunately, this Swiss model of holistic care is neither replicated nor alternatives resourced in most other OECD (Organisation for Economic Co-operation and Development) settings [19]. The recovery of physical, mental and social well-being therefore remains an ever-elusive goal for many opioid dependent patients and their practitioners.

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