

## Letter to the Editor

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### **IN PURSUIT OF A MORE COMPLEX UNDERSTANDING OF NON-MEDICAL USE OF PRESCRIPTION DRUGS: BROADENING PERSPECTIVE BY SHARPENING OUR TOOLS**

We appreciate the commentary by Fischer & Rehm but would like to respond to several points they raised [1,2]. First, we agree with Fischer & Rehm that individual trajectories of non-medical use of prescription drugs (NMUPD) often begin early, with the majority of NMUPD initiating before 21 years of age. We doubt, however, that the trajectories from early onset of NMUPD to prescription drug use disorders (PDUDs) are associated consistently with socio-economic class or educational status. While we were unable to assess this in the National Epidemiologic Survey on Alcohol Related Conditions (NESARC) because it did not measure socio-economic or educational status at the time of NMUPD onset, previous studies suggest that associations between these variables are complex and vary by prescription drug class [3–5]. For instance, the non-medical use of stimulant medications is more prevalent among those with higher income levels [3,5], while non-medical use of prescription opioids is more prevalent among those from lower income levels [3,4]. Individuals with higher educational levels were more likely to engage in the non-medical use of prescription stimulants than those with lower educational levels, but there were no such differences for the non-medical use of prescription opioids, sedatives or tranquilizers [3].

Secondly, we question whether most non-medical users coming from disadvantaged circumstances are 'self-medicators'. Being economically disadvantaged or uninsured may limit access to prescription medication but regardless of motivation (self-treatment versus recreational use), there are notable risks for non-medical users who self-treat. For example, 'self-treaters' do not receive clinical assessments, medical follow-ups or medical information that accompanies a prescription. Thus, self-treaters may be unaware of contraindications or probable interaction with other drugs. Furthermore, abusable prescription medications can produce physical dependence and withdrawal symptoms upon discontinuation. The odds of past-year PDUDs among those who report past-year NMUPD was considerably higher among

individuals with lower income levels than those with higher income levels [6].

We noted the limitations of self-report measures using life-time time-frame and expressed the hope that prospective longitudinal studies will examine the natural history of NMUPD. We agree with Fischer & Rehm that more detailed measures are needed in order to obtain a more complex understanding of NMUPD; advances in our understanding of NMUPD will not be possible until we reconsider the assessment tools that measure NMUPD. Surprisingly, few advances have been made since Hubbard and colleagues showed the limitations of using a single measure to assess NMUPD and advocated decomposing the single NMUPD measure into separate questions 15 years ago [7]. Improvements in measurement of NMUPD and use of prospective longitudinal designs will help to determine if early onset of NMUPD is simply a correlate of PDUDs or a causal risk factor [8] that might represent a target for prevention and intervention.

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