Published in final edited form as:

J Addict Med. 2016 ; 10(4): 283–285. doi:10.1097/ADM.0000000000000236.

When added to opioid agonist treatment, psychosocial interventions do not further reduce the use of illicit opioids: A comment on Dugosh et al.

Robert P. Schwartz, M.D.

Friends Research Institute, 1040 Park Avenue, Suite 103, Baltimore, MD 21201-5633, Tel: 410-838-3977 (x 276), Fax: 410-752-4218, rschwartz@friendsresearch.org

University of Maryland School of Medicine, Department of Psychiatry

Dugosh et al. (2016) provided a useful service to readers by structuring their review of psychosocial treatment in conjunction with medication for opioid addiction by medication type (e.g., agonist v. antagonist), duration of medication treatment (maintenance v. detoxification) and types of “psychosocial treatment.” Unfortunately, the review did not specify what patient outcome was the focus of the review, the summary of the articles in the review were less than precise, and the discussion section considered all psychosocial treatments as if they were interchangeable.

Given the review's well-justified emphasis on the importance of addressing the opioid epidemic in the US, the key outcome in the review should have been opioid use. Yet, the specific outcome(s) of interest were not presented nor justified in the methods section and as a result findings were presented on no less than 20 outcomes as varied as “positive appraisal,” “counselor ratings,” and “retention in a therapeutic workplace.” This unfocused approach obfuscated the review's findings and its implications.

The review reported that 9 of the 27 studies demonstrated the efficacy of psychosocial interventions combined with medications in reducing opioid use. Upon closer examination, as described below, all those studies were either reviewed incorrectly or had significant methodological limitations that limited the ability to draw definitive conclusions. For the three-group RCT by Gruber et al. (2008), the superiority in reducing illicit opioid use in the group assigned to receive 6-months of methadone treatment with minimal services compared to a 21-day methadone detoxification was incorrectly attributed to the “psychosocial treatment” consisting of a minimal services (once-a-month brief check-in) rather than the continuous availability of methadone in the first group. The review also failed to mention that there were no differences in illicit opioid use between the minimal services group and the third group assigned to methadone treatment with standard counseling.

Three of the 9 studies were of contingency management in methadone treatment conducted in China whose findings may not generalize to the US and had low methadone doses (Chawarski et al., 2011; Chen et al., 2013; Hser et al., 2011). The Chawarski et al. (2011)

Conflict of interest: The author performed a one-time consultation for Reckitt Benckiser on behalf of his employer.

paper was a pilot study with only 37 participants, the Chen et al. (2011) paper was inaccurately reported in the review as having randomly assigned patients to condition, when the randomization was at the clinic level ($n=4$). Finally the Hser et al. (2011) had major differences in outcomes between its two study sites obscuring the various statistical findings regarding drug use.

Nyamathi et al. (2011) did not measure opioid use and Dunn et al. (2013) reported no differences in opioid use among study conditions, yet the review selectively mentions that secondary analyses show evidence that the interventions reduced opioid use. The study by Brigham et al. (2014) was a pilot study in the context of detoxification and the Marsch et al. (2014) study in methadone treatment found that *replacing* some in-person counseling sessions with computerized counseling was superior to standard methadone and hence did not provide evidence that *adding* psychosocial treatment improves outcomes. Finally, the study by Ruetsch et al. (2012) had only a 66% follow-up rate at 12 months and no urine testing data.

After carefully reviewing individual studies by psychosocial treatment type, the article's discussion inexplicably lumps all psychosocial treatments and patient outcomes as if they were interchangeable. Thus, the review draws the wrong conclusions by stating "the reviewed studies generally support the efficacy of providing psychosocial therapy in combination with medications for the treatment of opioid addiction" and "it is imperative to ensure that physicians understand that the best outcome for patients taking these medications may be achieved when they are used in conjunction with psychosocial interventions." The review misses an important opportunity to clearly delineate the challenges facing the treatment field in addressing the rising tide of opioid use disorders. It reinforces the commonly held belief, not supported by research evidence, that opioid agonist treatment alone is inferior treatment to such treatment combined with "psychosocial" treatment (which many will understand to mean counseling).

An RCT overlooked by the review, Schwartz et al. (2011; 2012) found no difference in opioid use between participants assigned to methadone with *v.* without counseling. When these results are considered alongside three other well-conducted negative RCTs that compared buprenorphine with medical management alone to buprenorphine with: (1) cognitive behavioral therapy (Fiellin et al., 2013); (2) cognitive behavioral therapy, CM, and both (Ling et al., 2013); and extra manualized counseling sessions (Weiss et al., 2011), the most parsimonious conclusion is that patients randomly assigned to opioid agonist treatment without additional psychosocial treatments appear to reduce their opioid use as much as those receiving additional psychosocial treatment with their agonist medications.

The notion that opioid agonists should only be provided with psychosocial treatment results in limitations on the use of these effective medications. Physicians should be informed that prescribing an opioid agonist or antagonist along with medical management can be an effective approach to reducing illicit opioid use. In OTPs, "Interim methadone" (IM), which permits people on OTP waiting lists to receive methadone without counseling for up to 120 days, could be widely used where waiting lists exist but for the burdensome regulations that

were based in part on the assumptions about the critical importance of psychosocial treatments that this review attempts to support.

As shown in a series of RCTs, providing methadone alone compared to placing patients on a waiting list significantly suppresses illicit opioid use, increases the likelihood of admission to standard methadone treatment (Schwartz et al., 2006; 2007; Yancovitz et al., 1993), and reduces arrests (Schwartz et al., 2009). Further, patients treated with IM were not found to be disadvantaged compared to those treated with standard methadone treatment in terms of drug use and criminal activity (Schwartz et al., 2011; 2012) and HIV-risk behavior (Kelly et al., 2012). There are many federal restrictions on the use of IM, including a 120-day limit, no take-homes permitted, and disqualifying its use by for-profit OTPs. While opioid-addicted patients with additional particular concurrent problems (such as mental disorders, cocaine use, unemployment) may benefit from interventions focused on those particular issues (as would other substance abuse patients not on medications), the current evidence indicates that opioid agonist medications provided at adequate doses are effective in reducing illicit opioid use with (and without) other psychosocial interventions. Physicians should be encouraged to use these medications to treat their opioid-addicted patients and not be discouraged by the fact that they cannot by themselves address all of the additional psychosocial problems a particular patient might have. If this were the way medicine were practiced, many patients would not receive medical care.

Acknowledgments

Source of funding: This work was supported through National Institute on Drug Abuse (NIDA) Grant Nos. 2R01DA15842 and 2U01DA013636.

Role of funding source: NIDA or the National Institutes of Health had no role in the preparation, review, or approval of this manuscript.

References

- Brigham GS, Slesnick N, Winhusen TM, et al. A randomized pilot clinical trial to evaluate the efficacy of community reinforcement and family training for treatment retention (CRAFT-T) for improving outcomes for patients completing opioid detoxification. *Drug Alcohol Depend.* 2014; 138:240–241. [PubMed: 24656054]
- Chawarski MC, Zhou W, Schottenfeld RS. Behavioral drug and HIV risk reduction counseling (BDRS) in MMT programs in Wuhan, China: A pilot randomized clinical trial. *Drug Alcohol Depend.* 2011; 115(3):237–239. [PubMed: 21159452]
- Chen W, Hong Y, Zou X, et al. Effectiveness of prize-based contingency management in a methadone maintenance program in China. *Drug Alcohol Depend.* 2013; 133(1):270–274. [PubMed: 23831409]
- Dugosh K, Abraham A, Seymour B, et al. A systematic review on the use of psychosocial interventions in conjunction with medications for the treatment of opioid addiction. *J Addict Med.* 2016; 10(2):93–101. [PubMed: 26808307]
- Dunn KE, Defulio A, Everly JJ, et al. Employment- based reinforcement of adherence to oral naltrexone treatment in un-employed injection drug users. *Exp Clin Psychopharmacol.* 2013; 21(1):74–83.
- Fiellin DA, Barry DT, Sullivan LE, et al. A Randomized Trial of Cognitive Behavioral Therapy in Primary Care-based Buprenorphine. *Am J Med.* 2013; 126(1):74, e11–77. [PubMed: 23260506]

- Gruber VA, Delucchi KL, Kielstein A, et al. A randomized trial of 6-month methadone maintenance with standard or minimal counseling versus 21-day methadone detoxification. *Drug Alcohol Depend.* 2008; 94(1-3):199–206. [PubMed: 18243585]
- Hser YI, Li J, Jiang H, et al. Effects of a randomized contingency management intervention on opiate abstinence and retention in methadone maintenance treatment in China. *Addiction.* 2011; 106(10): 1801–1809. [PubMed: 21793958]
- Kelly SM, Schwartz RP, O'Grady KE, et al. Impact of methadone with versus without drug abuse counseling on HIV risk: 4- and 12-month findings from a clinical trial. *J Addict Med.* 2012; 6(2): 145–152. [PubMed: 22134175]
- Ling W, Hillhouse M, Ang A, et al. Comparison of Behavioral Treatment Conditions in Buprenorphine Maintenance. *Addiction.* 2013; 108(10):1788–1798. [PubMed: 23734858]
- Marsch LA, Guarino H, Acosta M, et al. Web-based behavioral treatment for substance use disorders as a partial replacement of standard methadone maintenance treatment. *J Subst Abuse Treat.* 2014; 46(1):43–51. [PubMed: 24060350]
- Nyamathi AM, Nandy K, Greengold B, et al. Effectiveness of intervention on improvement of drug use among methadone maintained adults. *J Addict Dis.* 2011; 30(1):6–16. [PubMed: 21218306]
- Ruetsch C, Tkacz J, McPherson TL, et al. The effect of telephonic patient support on treatment for opioid dependence: outcomes at one year follow-up. *Addict Behav.* 2012; 37(5):686–9. [PubMed: 22348921]
- Schwartz RP, Highfield DA, Jaffe JH, et al. A randomized controlled trial of interim methadone maintenance. *Arch Gen Psychiatry.* 2006; 63(1):102–109. [PubMed: 16389204]
- Schwartz RP, Jaffe JH, Highfield, et al. A randomized controlled trial of interim methadone maintenance: 10-month follow-up. *Drug and Alcohol Dependence.* 2007; 86(1):30–36. [PubMed: 16793221]
- Schwartz RP, Jaffe JH, O'Grady KE, et al. Interim methadone treatment: impact on arrests. *Drug Alcohol Depend.* 2009; 103(3):148–154. [PubMed: 19443133]
- Schwartz RP, Kelly SM, O'Grady KE, et al. Interim methadone treatment compared to standard methadone treatment: 4-Month findings. *J Subst Abuse Treat.* 2011; 41(1):21–29. [PubMed: 21353445]
- Schwartz RP, Kelly SM, O'Grady KE, et al. Randomized trial of standard methadone treatment compared to initiating methadone without counseling: 12-month findings. *Addiction.* 2012; 107(5):943–952. [PubMed: 22029398]
- Weiss RD, Potter JS, Fiellin DA, et al. Adjunctive counseling during brief and extended buprenorphinenaloxone treatment for prescription opioid dependence: a 2-phase randomized controlled trial. *Arch Gen Psychiatry.* 2011; 68(12):1238–1246. [PubMed: 22065255]
- Yancovitz SR, Des Jarlais DC, Peyser NP, et al. A randomized trial of an interim methadone maintenance clinic. *Am J Public Health.* 1991; 81(9):1185–1191. [PubMed: 1659236]