LEGITIMIZING ‘THE MEDICAL PRESCRIPTION OF MONEY’

The study of DeFulio and colleagues [1] unpacks the efficacy of abstinence reinforcement maintenance in achieving sustained cocaine abstinence. In my opinion two hallmarks can be identified in this study: (i) a controlled work-setting that utilizes feasible reinforcers within patients’ communities capable of outweighing substance using behaviour such as employment and wages; and (ii) sustainability of abstinence by long-term exposure to these reinforcers. Although many clinicians may acknowledge the clinical relevance by using positive reinforcement methods in their daily routine such as praises, clinic attendance privileges, methadone take-home dosages and holiday privileges, aspects related to the financial, moral and ideological arguments that encumber the transfer and adoption of this novel reinforcement based technology merits a broader discussion.

Evolved from the Skinnerian ‘token economy’ [2], contingency management (CM) has consistently emerged from research as a highly effective clinical intervention for modifying substance using behaviour. In general, the linchpin being the provision of reinforcing consequences in terms of tangible or contrived reinforcers upon a predefined objective treatment goal (e.g. abstinence) or by withholding these consequences when a patient does not fulfill the desired goal. The costs involved in CM have been identified as a daunting issue that precludes the dissemination in regular practice [6, 7]. A cost-saving offshoot, known as prize-based or low-cost CM, has been effectively employed in which only a proportion of the behaviours are reinforced [8]. Due to intermittent reinforcement the overall magnitudes of expected winnings are reduced in the order of one-third, but concerns have been raised over the reinforcer value in relation to the associated treatment outcome [9].

Entangled with the financial aspects of CM are also ideological, moral and political opinions that have impact on the widespread dissemination. For instance, hampering moral views toward addiction are still prevalent in our society and fixate upon the patients’ impaired sense of responsibility and willpower. This view has often driven the nature of treatments to be confrontational, with the intention of breaking down the virulent defence mechanisms in order to garner problem recognition and treatment acceptance. Addictive behaviours are still viewed, by many people, in a strict moral context whereby a monetary reinforcement perspective is rejected as it ‘pays drug abusers to do what they should do anyway’ [10]. DeFulio et al. [1] creatively target work, harnessed on earning salary contingent on abstinence reinforcement, which seems to adhere to the existing moral values and ideology in the general public. Moreover, it supports the view of clinicians towards CM who consider social incentives more auspicious than tangible ones [7, 11].

In general, criticisms of CM include the slow dissipation of the favourable effects after treatment discontinuation and the inattention to the underlying chronic nature of addiction. The study of DeFulio et al. [1] demonstrates that a reinforcement based maintenance treatment is feasible and opens new avenues for research by exploring the long-term effects of CM maintenance which is apparently associated with comparable economic costs as other treatment modalities and has the potential to be self-sustainable [12].

A weakness dwells in the selection-bias with respect to the reported minority of the participants who were eligible for engagement in the maintenance program (phase 2). The authors recommend higher wages to improve the outcomes, though this may simultaneously represent a disadvantage which could be a barrier to successful dissemination due to higher exploitation costs. Furthermore, during the induction phase, vouchers – exchangeable for goods and services – were employed, which may hold a lower reinforcement magnitude than paychecks. It is noteworthy that the concern of misuse of cash-based incentives to substance users has not been supported [13].

Another option to ameliorate retention rates may be the inclusion of the Community Reinforcement Approach (CRA). CRA focuses on the management of substance-related behaviours and other disrupted life-areas [14]. Both interventions seem to converge, as they target real-life reinforcement and their ability to maintain valuable gains. Supplementing CM with CRA has considerable auxiliary effects on salient outcomes such as the use of cocaine, treatment retention and employment rates [15].

Finally, future research to extend generalisability could be to look at other diagnostic samples and alternative treatment goals such as moderation and harm-reduction. In addition, the emergence of similar abstinence-contingent applications with respect to housing [16] appear to be viable routes to successful outcomes. More initiatives are needed that contribute to the arrangement of reinforcement-based interventions and should pursue reconfiguration of patients’ own community settings in
order to support the autonomy of addicted patients and to assist in their navigation through society.

Declaration of interest
None.

Keywords abstinence reinforcement, contingency management, implementation, moral, operant conditioning, therapeutic workplace.

HENDRIK G. ROOZEN
Bouman Mental Health (GGZ), Thorbeckelaan 63, 3201 WJ Spijkenisse, and Erasmus University Medical Centre, Department of Forensic Psychiatry, P.O. box 2040, 3000 CA Rotterdam, the Netherlands.
E-mail: h.roozen@boumanngz.nl; h.roozen@erasmusmc.nl

References