

## **Problem Management Plus and Alcohol (PM+A): A New Intervention to Address Alcohol Misuse and Psychological Distress Among Conflict-Affected Populations**

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### **Abstract**

Problem Management+ (PM+) is a transdiagnostic intervention and addresses symptoms across multiple common mental disorders. It does not yet include strategies to reduce alcohol misuse which is a considerable problem among conflict-affected men, and part of the co-morbidity spectrum. In this commentary, we describe the need to address symptoms of common mental disorders and alcohol misuse among conflict-affected populations. We introduce the CHANGE project (Alcohol use in humanitarian settings: A programme of work to address alcohol use and associated adversities among conflict-affected populations in Uganda and Ukraine) which tries to fill the evidence gap in intervention research, and seeks to complement PM+ with components addressing alcohol misuse. The principal output of the CHANGE project will be a new intervention manual called PM+A which will be made available in an open access format.

**Keywords:** Problem Management Plus; transdiagnostic intervention, alcohol misuse, common mental disorders, conflict-affected populations

Problem Management Plus (PM+) is a brief psychological intervention designed to address psychological distress in people exposed to adversity, such as violence and poverty (WHO, 2016). PM+ is a transdiagnostic intervention (i.e., it addresses symptoms across multiple common mental disorders) and has been shown to cost-effectively reduce symptoms of depression, anxiety and post-traumatic stress disorder (PTSD; Bryant et al., 2017; Hamdani et al., 2020; Rahman et al., 2016; Rahman et al., 2019). PM+ has been taken up by humanitarian organisations working in mental health and psychosocial support (MHPSS) due to the intervention's versatile and feasible approach of being transdiagnostic, delivered in group or individual format, and delivered by professional or nonprofessional health workers, including those from the affected population (WHO, 2018).

Transdiagnostic psychological interventions like PM+ have been developed because disorder specific interventions inadequately address comorbidity between common mental disorders (Fusar-Poli et al., 2019), which is common in the general population (Kessler et al., 2010), and among populations affected by armed conflict (Acarturk et al., 2020; Charlson et al., 2019). Studies with general populations have also established strong links between common mental disorders and substance use disorders, and suggest a high-treatment gap when such comorbidity exists (Harris et al., 2019). Research among conflict-affected populations reflects this, with alcohol misuse associated with anxiety, depression, and PTSD (Lo et al., 2017).

The prevalence of alcohol misuse among conflict-affected populations varies across contexts but appears considerable, particularly among men. For example, Ezard et al. (2010) report the prevalence of hazardous or harmful alcohol consumption to be around 36% among refugee men in Thailand while Luitel et al. (2013) suggest a prevalence of 23% among male Bhutanese refugees in Nepal. Similar findings have been found among internally displaced men in Uganda and Georgia where a prevalence of hazardous or harmful alcohol consumption of 32% (Roberts et al., 2011) and 28% (Roberts et al., 2014) has been found. There is strong evidence to suggest that alcohol may be used as a coping strategy to deal with exposure to violent and traumatic events and ongoing daily stressors in new areas of settlement such as impoverishment, unemployment, poor living conditions, social isolation, and discrimination (UNHCR, 2018), and it may also cause or result from psychosocial distress (Luitel et al., 2013).

There is an urgent need to develop and implement interventions addressing alcohol misuse in conflict-affected populations for several reasons. Alcohol misuse is associated with adverse social impacts including impaired family life, daily functioning, and loss of economic productivity (Lo et al., 2017). It is also associated with a higher risk of intimate partner violence, which is a major concern in conflict-affected populations (Lo et al., 2017; UNHCR, 2018). Alcohol misuse may also adversely impact other existing mental health problems, increase risk for communicable and noncommunicable diseases, and may inhibit health seeking behaviour and treatment (Griswold et al., 2018).

A 2018 report from the United Nations High Commissioner for Refugees (UNHCR) and other research have highlighted that alcohol misuse among forcibly-displaced populations is a neglected problem, and that interventions addressing alcohol misuse, which can be feasibly implemented in challenging and complex humanitarian environments are lacking (Lo et al., 2017; Roberts & Ezard, 2015; UNHCR, 2018). The main guidelines in humanitarian settings recommend actions to address alcohol misuse in conflict-affected settings, but provide little detail on appropriate interventions and ways to implement them (IASC, 2007; Sphere, 2018).

This may be because existing alcohol use disorder interventions, other than the Common Element Treatment Approach (CETA; Murray et al., 2020), are for general populations and may not be considered appropriate for conflict-affected populations as they are not adapted to their particular needs, do not address other forms of psychosocial distress, and often rely on mental health professionals who are in short supply in such settings.

The CHANGE project (Alcohol use in humanitarian settings: A programme of work to address alcohol use and associated adversities among conflict-affected populations in Uganda and Ukraine) is trying to fill the evidence gap about interventions addressing alcohol use disorder among conflict-affected populations (LSHTM, 2020). CHANGE seeks to complement PM+ with components addressing alcohol misuse. ‘Problem Management Plus and Alcohol’ (PM+A) will comprise strategies to specifically treat alcohol use disorders in addition to selected PM+ strategies to treat underlying symptoms of common mental disorders.

PM+A will follow a ‘brief therapy’ approach, rather than being a ‘brief intervention’ because brief therapies address more profound drinking problems whereas brief interventions can be considered preventive only (SAMHSA, 1999). Brief therapies for alcohol-use disorders target moderate and high-risk drinkers and commonly consist of around five sessions of approximately 30 minutes each, utilising components of cognitive behaviour therapy and motivated enhancement techniques. However, research shows that brief therapies for alcohol-use disorders are rarely implemented in low- and middle-income countries (Nadkarni et al., 2017). One brief therapy for alcohol-use disorders implemented and rigorously evaluated in a low- and middle-income country was delivered to harmful drinkers by lay health care providers and showed significant positive effects on drinking outcomes at 3 months, and a sustained effect at 12 months (Nadkarni et al., 2017). Similarly, results of CETA implemented in Zambia showed that CETA was more effective than treatment as usual in reducing intimate partner violence and hazardous alcohol use among high-risk couples (Murray et al., 2020).

PM+A will be developed through a comprehensive formative research process. This will include community-based participatory research to adapt the intervention to local circumstances, and to examine the feasibility, acceptability, perceived effectiveness, and preliminary impact of PM+A in a pilot study before evaluating its (cost) effectiveness through two randomised controlled trials. CHANGE will also include an in-depth process evaluation to identify, characterise and explain mechanisms that promote or inhibit the delivery and take-up of PM+A across the study sites, and will examine the potential for scaling up PM+A. PM+A will be implemented among refugees from South Sudan living in the West Nile region in Uganda and internally displaced persons and other conflict-affected men (e.g., military veterans) in the region of Dnipro in Ukraine. These study locations have been selected because they have high levels of alcohol misuse, mental disorders, gender-based violence, and a high-mental health care gap. The advantages of conducting the study in these two varied settings are that they represent very different socio-economic, cultural, and humanitarian characteristics, which supports understanding of the contextual influences on adapting and implementing PM+A and the comparison of outcomes and processes between the two sites can then help inform the future development and application of PM+A elsewhere. The principal outputs of CHANGE will be a transdiagnostic intervention - addressing alcohol misuse and underlying psychological distress - and an open access PM+A intervention manual. These will be a key to addressing the neglected issue of alcohol misuse among conflict-affected populations globally.

## References

- Acarturk, C., McGrath, M., Roberts, B., Ilkkursun, Z., Cuijpers, P., Sijbrandij, M., Sondorp E, Ventevogel P, McKee M, & Fuhr, D. C., (2020). Prevalence and predictors of common mental disorders among Syrian refugees in Istanbul, Turkey: a cross-sectional study. *Social Psychiatry Psychiatric Epidemiology*. doi:10.1007/s00127-020-01941-6
- Bryant, R. A., Schafer, A., Dawson, K. S., Anjuri, D., Mulili, C., Ndogoni, L., Koyiet, P., Sijbrandij, M., Ulate, J., Harper Shehadeh, M., Hadzi-Pavlovic, D., & van Ommeren, M. (2017). Effectiveness of a brief behavioural intervention on psychological distress among women with a history of gender-based violence in urban Kenya: A randomised clinical trial. *PLoS Medicine*, 14(8), e1002371. <http://doi.org/10.1371/journal.pmed.1002371>
- Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, W., & Saxena, S. (2019). New WHO prevalence estimates of mental disorders in conflict settings: A systematic review and meta-analysis. *Lancet*. 2019 Jul 20;394(10194):240-248.
- Ezard, N., Debakre, A., & Catillon, R. (2010). Screening and brief intervention for high-risk alcohol use in Mae La refugee camp, Thailand: A pilot project on the feasibility of training and implementation. *Intervention*, 8(3), 223-232.
- Fusar-Poli, P., Solmi, M., Brondino, N., Davies, C., Chae, C., Politi, P., Borgwardt, S., Lawrie, S. M., Parnas, J., & McGuire, P. (2019). Transdiagnostic psychiatry: A systematic review. *World Psychiatry*, 18(2), 192-207. <http://doi.org/10.1002/wps.20631>
- Griswold, M. G., Fullman, N., & Hawley, C. (2018). Alcohol use and burden for 195 countries and territories, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet*, 392(10152), 1015-1035.
- Hamdani, S. U., Huma, Z. E., Rahman, A., Wang, D., Chen, T., van Ommeren, M., Chisholm, D., & Farooq, S. (2020). Cost-effectiveness of WHO Problem Management Plus for adults with mood and anxiety disorders in a post-conflict area of Pakistan: randomised controlled trial. *Br J Psychiatry*, 1-7. <http://doi.org/10.1192/bjp.2020.138>
- Harris, M. G., Bharat, C., Glantz, M. D., Sampson, N. A., Al-Hamzawi, A., Alonso, J., Bruffaerts, R., Caldas de Almeida, J. M., Cia, A. H., de Girolamo, G., Florescu, S., Gureje, O., Haro, J. M., Hinkov, H., Karam, E. G., Karam, G., Lee, S., Lépine, J. P., Levinson, D., . . . Degenhardt, L. (2019). Cross-national patterns of substance use disorder treatment and associations with mental disorder comorbidity in the WHO World Mental Health Surveys. *Addiction*, 114(8), 1446-1459. <http://doi.org/10.1111/add.14599>
- IASC. (2007). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: <http://www.humanitarianinfo.org/iasc/content/documents/weekly/20070620-1345/Guidelines%20IASC%20Mental%20Health%20Psychosocial.pdf>
- Kessler, R. C., Birnbaum, H. G., Shahly, V., Bromet, E., Hwang, I., McLaughlin, K. A., Sampson, N., Andrade, L. H., de Girolamo, G., Demyttenaere, K., Haro, J. M., Karam, A. N., Kostyuchenko, S., Kovess, V., Lara, C., Levinson, D., Matschinger, H., Nakane, Y., Browne, M. O., . . . Stein, D. J. (2010). Age differences in the prevalence and co-morbidity of DSM-IV major depressive episodes: Results from the WHO World Mental Health Survey Initiative. *Depress Anxiety*, 27(4), 351-364. <http://doi.org/10.1002/da.20634>
- Lo, J., Patel, P., Shultz, J. M., Ezard, N., & Roberts, B. (2017). A systematic review on harmful alcohol use among civilian populations affected by armed conflict in low- and middle-income countries. *Subst Use Misuse*, 52(11), 1494-1510. <http://doi.org/10.1080/10826084.2017.1289411>
- LSHTM. (2020 ). *CHANGE - Alcohol use in humanitarian settings. A programme of work to address alcohol use and associated adversities among conflict-affected populations*. <https://www.lshtm.ac.uk/research/centres-projects-groups/change>
- Luitel, N. P., Jordans, M., Murphy, A., Roberts, B., & McCambridge, J. (2013). Prevalence and patterns of hazardous and harmful alcohol consumption assessed using the AUDIT among Bhutanese refugees in Nepal. *Alcohol Alcohol*, 48(3), 349-355. <http://doi.org/10.1093/alcalc/agt009>

- Murray, L. K., Kane, J. C., Glass, N., Skavenski van Wyk, S., Melendez, F., Paul, R., Danielson, C.K., Murray, S.M., Mayeya, J., Simenda, F., Bolton, P. (2020). Effectiveness of the Common Elements Treatment Approach (CETA) in reducing intimate partner violence and hazardous alcohol use in Zambia (VATU): A randomized controlled trial. *PLoS Medicine*, *17*(4), e1003056. <http://doi.org/10.1371/journal.pmed.1003056>
- Nadkarni, A., Weiss, H. A., Weobong, B., McDaid, D., Singla, D. R., Park, A. L., Bhat, B., Katti, B., McCambridge, J., Murthy, P., King, M., Wilson, G.T., Kirkwood, B., Fairburn, C.G., Velleman, R., Patel, V. (2017). Sustained effectiveness and cost-effectiveness of Counselling for Alcohol Problems, a brief psychological treatment for harmful drinking in men, delivered by lay counsellors in primary care: 12-month follow-up of a randomised controlled trial. *PLoS Medicine*, *14*(9), e1002386. <http://doi.org/10.1371/journal.pmed.1002386>
- Rahman, A., Hamdani, S. U., Awan, N. R., Bryant, R. A., Dawson, K. S., Khan, M. F., Azeemi, M.M., Akhtar, P., Nazir, H., Chiumento, A., Sijbrandij, M., Wang, D., Farooq, S., van Ommeren, M. (2016). Effect of a multicomponent behavioral intervention in adults impaired by psychological distress in a conflict-affected area of Pakistan: A randomized clinical trial. *JAMA*, *316*(24), 2609-2617. <http://doi.org/10.1001/jama.2016.17165>
- Rahman, A., Khan, M. N., Hamdani, S. U., Chiumento, A., Akhtar, P., Nazir, H., Nisar, A., Masood, A., Din, I.U., Khan, N.A., Bryant, R.A., Dawson, K.S., Sijbrandij, M., Wang, D., & van Ommeren, M. (2019). Effectiveness of a brief group psychological intervention for women in a post-conflict setting in Pakistan: a single-blind, cluster, randomised controlled trial. *Lancet*, *393*(10182), 1733-1744. [http://doi.org/10.1016/s0140-6736\(18\)32343-2](http://doi.org/10.1016/s0140-6736(18)32343-2)
- Roberts, B., & Ezard, N. (2015). Why are we not doing more for alcohol use disorder among conflict-affected populations? *Addiction*, *110*(6), 889-890. <http://doi.org/10.1111/add.12869>
- Roberts, B., Felix Ocaka, K., Browne, J., Oyok, T., & Sondorp, E. (2011). Alcohol disorder amongst forcibly displaced persons in northern Uganda. *Addictive Behaviors*, *36*(8), 870-873. <http://doi.org/10.1016/j.addbeh.2011.03.006>
- Roberts, B., Murphy, A., Chikovani, I., Makhshvili, N., Patel, V., & McKee, M. (2014). Individual and community level risk-factors for alcohol use disorder among conflict-affected persons in Georgia. *PLoS One*, *9*(5), e98299. <http://doi.org/10.1371/journal.pone.0098299>
- SAMHSA (1999). *Brief Interventions and Brief Therapies for Substance Abuse*. <https://www.ncbi.nlm.nih.gov/books/NBK64947/>
- Sphere (2018). *Sphere Handbook - Humanitarian Charter and Minimum Standards in Humanitarian Response 2018 edition*. <https://handbook.spherestandards.org/en/sphere/#ch001>
- UNHCR (2018). *Addressing Alcohol and Substance Use Disorders among Refugees: A Desk Review of Intervention Approaches*. Geneva: United Nations High Commissioner for Refugees
- WHO (2016). *Problem Management Plus (PM+). Individual psychological help for adults impaired by distress in communities exposed to adversity*. 2016, Geneva, World Health Organization
- WHO (2018). *Scaling up capacity for Problem Management Plus (PM+)*. [https://www.who.int/mental\\_health/emergencies/PM\\_plus\\_2018/en/](https://www.who.int/mental_health/emergencies/PM_plus_2018/en/)