Research Protocol

Research title: The effect of a life skills education programme on mental health and social competencies among young prisoners in Cambodia: an intervention study

Research team:

Puthy Pat

Centre for Child and Adolescent Mental Health (Caritas-CCAMH), Cambodia

pat.puthy@umu.se

Linda Richter Sundberg

Department of Epidemiology and Global Health, Umeå University, Sweden

linda.sundberg@umu.se

Bhoomikumar Jegannathan

Centre for Child and Adolescent Mental Health (Caritas-CCAMH), Cambodia

bhoomikumar.jegannathan@caritascambodia.org

Miguel San Sebastian

Department of Epidemiology and Global Health, Umeå University, Sweden

miguel.san.sebastian@umu.se

Background

Prisoners are considered one of the most vulnerable populations to mental health problems (Tarolla et al., 2002). Studies have reported that the prevalence of these problems is five to ten times higher among prisoners as compared to the general population in different international studies (Aida et al., 2014; Fazel et al., 2016; Pat et al., 2021). Young prisoners, below 25 years of age, in particular may have five times more mental health problems than adult prisoners, the most common being anxiety, depression, and conduct problems (Gonçalves et al., 2017; Hofvander et al., 2017).

The increased risk of mental health problems in prisons is usually associated with preincarceration factors, but factors that arise while in prison may also play a role (Jordaan et al., 2018). For instance, a lack of life skills has been noted as one of the main reasons for imprisonment; once inside, chances to develop these skills are limited, causing the individual to become even more vulnerable (Jordaan et al., 2018). Life skills refer to one's abilities to adapt emotionally and behaviourally to different life situations so that he or she is able to successfully cope with daily challenges (Jordaan et al., 2018). When young people lack life skills competencies, they are more likely to become involved in risk-taking behaviours and/or criminal activities, such as sexual abuse, property damage, drug use, and gang activities (Abdu et al., 2018); as a consequence, they become imprisoned.

The World Health Organization (WHO) has developed and recommended a life skills education (LSE) programme to promote mental health and social well-being among adolescents (WHO, 1994). The LSE programme builds on a series of skills such as basic personal management, social and anger management, interpersonal communication, and healthy decision-making (WHO, 2020). This programme was originally designed for adolescents in a school setting and facilitated by teachers or group leaders over a period of time (WHO, 1994). It follows a participatory group approach comprised of small group discussions, brainstorming, and role-playing, and the facilitators present a health issue to the adolescents, encouraging them to think about the problem in a holistic manner and allowing them to present different feasible solutions (WHO, 2020).

LSE programmes have also been adapted and applied in the context of prisons, particularly among young prisoners (Jordaan et al., 2018). Nevertheless, it is important to contextualise the intervention in regards to the specificities of the individual countries. To our knowledge, there

are few studies that measure the impact of LSE programmes in prisons from low- and middleincome countries (LMICs) (Jordaan et al., 2018) and none from Cambodia. This study aimed to assess the effectiveness of an LSE programme on the mental health and life skills competencies among young prisoners in Cambodia.

Method

Study setting

Cambodia is located in Southeast Asia, a post-conflict country with more than 30 years of civil unrest and instability. The long-term war and conflict disrupted the health system and the provision of mental health services in particular (Somasundaram et al., 1999). While the health system has been gradually restored (Clarke et al., 2016; Goyet et al., 2015), the prison health system remains underdeveloped (Pung, 2015).

Study design and participants

There are 24 prisons spread all over the country, one in each province, with a total of 5,552 young prisoners between 15 and 24 years of age (*General Department of Prisons, Ministry of Interior*, 2016). A pre-post intervention study was conducted in four prisons that were randomly selected from the 24 total prisons. The General Department of Prisons reported the prevalence of female prisoners to be less than 1%; therefore, they were excluded from the study to secure confidentiality. 500 young male prisoners from ages 15 to 24 in these four prisons who remained in the prisons for a minimum period of six months after the pre-test were invited for the study.

Intervention programme

To meet the requirement of the General Department of Prisons, Cambodia, all participating young prisoners receive a stress-reducing intervention session. The intervention includes a 45-minute structured session to understand the stress of living away from families and being in prison, as well as how to relax themselves using simple breathing techniques.

One week after the breathing technique sessions, the LSE programme will be implemented to the intervention group over six consecutive weeks, each session lasting for approximately 90 minutes. The intervention group will be divided into groups of 20 to 25 members to receive each session. The following six modules are applied in the same order to the young prisoners in the intervention group in all the four prisons: 'Coping with stress–facing challenges and problems,'

3

'Self-awareness – Relationship-dealing with anger,' 'Relationship-peer pressure,' 'Relationshippeer pressure – say 'No' to drugs and tobacco,' 'Self-awareness-self-esteem,' and 'Selfawareness-coping with stress-suicide.' Each session includes five steps: introduction to the topic, activities (role-play, group work, or games), discussion, summary, and activities that are assigned for the prisoners to do between the six sessions. During the intervention sessions, less time is allocated for writing activities due to the low level of literacy among the prisoners, so more time is spent on demonstrations, fun activities, and role-play to encourage active participation. *Measures*

This study uses two questionnaires to assess the effectiveness of an LSE programme on mental health and life skills competencies among the young prisoners in Cambodia. They take approximately 45 minutes to administer. These questionnaires were translated into Khmer (official language of Cambodia) and had been used in previous studies in different countries (Rescorla et al., 2007), including Cambodia (Jegannathan et al., 2014).

The Youth Self-Report (YSR), a part of the Achenbach system of empirically based assessments, captures a range of mental health issues such as anxiety/depression, withdrawal depression, somatic complaints, thought problems, social problems, rule-breaking behaviour, aggression, and attention deficit (Achenbach, 2009). The internalising problems variable was constructed by merging items related to anxiety/depression, withdrawal depression, and somatic complaints, while the externalising one was formed by coalescing rule-breaking and aggressive behaviour as per the ASEBA manual (Achenbach, 2009). It consists of 112 items that are rated using a Likert system (0=not true, 1=somewhat true, and 2=often true). Since the cut-off score of the YSR has not yet been validated in Cambodia, the mean score was considered. Higher scores indicate higher mental health problems.

The Life Skills Development – Adolescent Form (LSD-AF) scale consists of 40 items that capture four dimensions: human relationship/interpersonal skills, decision-making/problems-solving skills, health maintenance/physical fitness skills, and the purpose in life (Darden et al., 1996). Out of the total number, 30 items were phrased in a positive way and the other 10 expressed in negative statements. During the interview, the participants responded as completely agree (1), mostly agree (2), mostly disagree (3), and completely disagree (4). At the time of analysis, the 30 items with positive formulations were reversed to indicate higher scores, meaning higher life

4

skills abilities. The LSD-AF used in this study had been previously translated into Khmer and adapted to the Cambodian cultural context (Jegannathan & Kullgren, 2011).

Data collection

The YSR and LSD-AF are typically self-administered; however, we found that most of the prisoners have minimal education or are illiterate; therefore their ability to understand and respond to the questionnaires is limited. Because of this, the research team will interview the participants face to face.

Analysis

Descriptive statistical analyses will be conducted to calculate the means of the total and specific YSR and LSD-AF scores for both the control and intervention groups during the pre- and post-assessment. To estimate the effect size across time, a comparison of the changes in mean scores of both the YSR and LSD-AF and its sub-domains are calculated by the difference-in-difference method (DiD) (Gertler et al., 2016). Statistical significance is determined at a 0.05 level. Since the mental health outcomes (YSR and LSD-AF scores) are continuous, linear regression models are applied.

Expected results

The intervention group will report significantly fewer mental health problems and higher life skills competencies compared to the control group after the intervention program.

Reference

- Abdu, Z., Kabeta, T., Dube, L., Tessema, W., & Abera, M. (2018). Prevalence and associated factors of depression among prisoners in Jimma Town Prison, South West Ethiopia. *Psychiatry journal*, *2018*.
- Achenbach, T. M. (2009). Achenbach system of empirically based assessment (ASEBA): Development, findings, theory, and applications. University of Vermont, Research Center of Children, Youth & Families.
- Aida, S., Aili, H., Manveen, K., Salwina, W., Subash, K., Ng, C., & Muhsin, A. (2014). Prevalence of psychiatric disorders among juvenile offenders in Malaysian prisons and association with socio-demographic and personal factors. *International journal of prisoner health*.
- Clarke, D., Duke, J., Wuliji, T., Smith, A., Phuong, K., & San, U. (2016). Strengthening health professions regulation in Cambodia: a rapid assessment. *Human resources for health*, 14(1), 1.
- Darden, C., Ginter, E., & Gazda, G. (1996). Life-Skills Development Scale-Adolescent Form: The theoretical and therapeutic relevance of life-skills. *Journal of Mental Health Counseling*, *18*(2), 142-163.

Fazel, S., Hayes, A. J., Bartellas, K., Clerici, M., & Trestman, R. (2016). Mental health of prisoners: prevalence, adverse outcomes, and interventions. *The Lancet Psychiatry*, 3(9), 871-881.
General Department of Prisons, Ministry of Interior. (2016). Phnom Penh

- Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. (2016). *Impact evaluation in practice*. The World Bank.
- Gonçalves, L. C., Dirkzwager, A. J., Rossegger, A., Gonçalves, R. A., Martins, C., & Endrass, J. (2017). Mental and physical healthcare utilization among Young prisoners: A longitudinal study. *International Journal of Forensic Mental Health*, *16*(2), 139-148.
- Goyet, S., Touch, S., Ir, P., SamAn, S., Fassier, T., Frutos, R., Tarantola, A., & Barennes, H. (2015). Gaps between research and public health priorities in low income countries: evidence from a systematic literature review focused on Cambodia. *Implementation Science*, *10*(1), 1.
- Hofvander, B., Anckarsäter, H., Wallinius, M., & Billstedt, E. (2017). Mental health among young adults in prison: the importance of childhood-onset conduct disorder. *BJPsych open*, *3*(2), 78-84.
- Jegannathan, B., Dahlblom, K., & Kullgren, G. (2014). Outcome of a school-based intervention to promote life-skills among young people in Cambodia. *Asian Journal of Psychiatry*, *9*, 78-84.
- Jegannathan, B., & Kullgren, G. (2011). Gender differences in suicidal expressions and their determinants among young people in Cambodia, a post-conflict country. *BMC psychiatry*, *11*(1), 1.
- Jordaan, J., Beukes, R., & Esterhuyse, K. (2018). The development and evaluation of a life skills programme for young adult offenders. *International journal of offender therapy and comparative criminology*, *62*(10), 3077-3096.
- Pat, P., Richter-Sundberg, L., Jegannathan, B., Edin, K., & San Sebastian, M. (2021). Mental health problems and suicidal expressions among young male prisoners in Cambodia: a cross-sectional study. *Global health action*, *14*(1), 1985229.
- Pung, C. K. (2015). RIGHTS AT A PRICE: Life inside Cambodia's prisons.
- Rescorla, L., Achenbach, T. M., Ivanova, M. Y., Dumenci, L., Almqvist, F., Bilenberg, N., Bird, H., Broberg, A., Dobrean, A., & Döpfner, M. (2007). Epidemiological comparisons of problems and positive qualities reported by adolescents in 24 countries. *Journal of consulting and clinical psychology*, *75*(2), 351.
- Somasundaram, D. J., Van De Put, W. A., Eisenbruch, M., & De Jong, J. T. (1999). Starting mental health services in Cambodia. *Social Science & Medicine*, *48*(8), 1029-1046.
- Tarolla, S. M., Wagner, E. F., Rabinowitz, J., & Tubman, J. G. (2002). Understanding and treating juvenile offenders: A review of current knowledge and future directions. *Aggression and violent behavior*, 7(2), 125-143.
- WHO. (1994). Life skills education for children and adolescents in schools. Pt. 3, Training workshops for the development and implementation of life skills programmes.
- WHO. (2020). Life skills education school handbook.