Section: Preliminary studies in PPT

AN INTERDISCIPLINARY AND MULTIDISCIPLINARY APPROACH BETWEEN MEDICAL EDUCATION AND POSITIVE TRANSCULTURAL PSYCHOTHERAPY TO LEAD SUICIDE PREVENTION STRATEGY FOR HEALTHCARE STUDENTS AND HEALTHCARE WORKERS



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Abstract

Suicidal ideation (SI), suicide attempts (SA), and completed suicides (CS), seem to be phenomena present globally and in heterogeneous growth. The objectives of this manuscript are to offer an overview of these phenomena related to mental health and mental well-being, focusing on the prevention of SI, SA, and CS, with multidisciplinary team (MDT) and interdisciplinary team (IDT) interventions that can be integrated into the daily activities of healthcare workers (HWs) and medical/healthcare students (MHSs). The role of medical education (MedEd) and counselling/psychotherapy, with particular interest in the PPT (Positive and Transcultural Psychotherapy), can become fundamental in intervention, identification, prevention activities, for MHSs and HWs.

Keywords: medical education, suicide, positive psychotherapy, mental wellbeing, prevention

Introduction

Globally, approximately 800000 suicides were estimated in 2012, around suicides/100000 people, and this number appears to have grown by 6.7% between 1990 and 2016 reaching an average of 817000 suicides in 2016, an increase of 60% in the last 45 years. SAs are globally about 20 times higher than CSs (around 16 million), and SIs are about 100 times more frequent than CSs (Wasserman, 2016; Naghavi, 2019; Chehil, 2012; Falcone, 2018). Regarding the MHSs in the first year of study, a rate like that of the previously mentioned general population of 11.4 / 100000 is given and a worsening of the state of mental health during subsequent years of study is indicated (Coentre, 2018). Furthermore, the prevalence of SIs appear to be between 6% and 43% in medical students, and and for university students in general, an annual rate of CSs between 6.5 and 7.5/100000 is estimated over 20 years (Yusoff et al., 2012; Carson et al., 2000; Iarovici, 2014); regarding HWs, the suicide rate is 1.41 times higher for men and

2.27 times higher for women, compared to the general population (Latifi, 2019). While data relating to CSs, SAs, and SIs may be influenced by cultural, religious, ethnic, educational, or other biases related to personal belief (Mehmet Eskin, 2018), it is necessary to intervene through prevention systems that can be considered inclusive, and that avoid generating sociocultural barriers, and stigmatization.

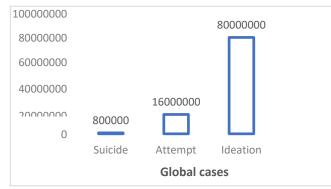


Fig. 1: Comparison between CSs, SAs, and Sis

1.1. Risk factors

The main risk factors in reference to MHSs and HWs are depression, burnout, excessive workload, occupation, dissatisfaction, lack of sense of belonging, alcohol consumption, stress, comorbid mental illness, post-traumatic stress disorder, feeling of isolation, previous SIs or SAs, anxiety, stressful personal events, gender, and race. With reference to the prevention of suicidality, there are wide-ranging difficulties that can compromise the necessary actions. Stigma of suicidal ideation and attempted suicide are a cultural factor that leads to isolation and discrimination (and self- isolation, selfdiscrimination, and self-stigmatisation) which makes it difficult to track down people in need of support. Poor awareness of possible support poor knowledge of risk factors, behavioural signs, and symptoms make it difficult for the subject to be aware of the need for support, as well as lack of knowledge and awareness of suicidality as a multifactorial product, and perception of suicidality as a cultural taboo, due to possible communication and multidisciplinary/interdisciplinary activity deficiencies (Wasserman, 2016; Wasserman, 2021; Soper 2018).

Methodology

2.1. The role of medical education

The primary role of MedEd relates to curriculum development and intervention, organization, leadership, assessment, of academic programs defined undergraduate, postgraduate, and continuing professional development. Deepening the role does not exclusively concern what is defined as "teaching and learning" but appears to have an important role in the development of wellbeing for MHSs and HWs, which will become well-being and safety for patients. The well-

being of MHSs and HWs impact on their performance, on the acquisition of skills and competences, on personal and professional development, and on healthcare and educational providers. In this regard, medical education acts by planning and organizing support and monitoring systems for learners (MHSs, and HWs in lifelong learning), thus influencing the area concerning welfare and well-being (Meeks et al., 2019; Bishop et al., 2018), the pillar of education, and the pillar of community involvement and interaction, as visible from diagram 1.

2.2. The role of Positive and Transcultural Psychotherapy

The university and the healthcare workplaces are subject to high migration flows, which allow the structuring of multicultural, transcultural, and dynamic environments, in which it is necessary to understand and face the challenges deriving from the encounters and interactions of different cultures, habits, backgrounds, and relational modalities (Peseschkian, 1990; Kirmayer, 2022). In connection with the migratory dynamics and in line with the objectives of suicide prevention among MHSs and HWs, PPT describes characteristics and methods in line with the challenge. PPT turns out to be a humanistic psychodynamic modality, conflict-centred and resource-oriented, in which cognitivebehavioural aspects are integrated, based on a positive and transcultural approach. Among the objectives of PPT are the promotion and development of well-being and physical, mental, social health, awareness of human potential in its complexity. The PPT modality follows different objectives and can be applied in different areas, such as the treatment of psychosomatic and mental health disorders (therapeutic), counselling-prevention-

education (preventative and pedagogical), dissemination of transcultural understanding (Transcultural-societal approach), and use of different integrated modalities of therapeutic methodologies (interdisciplinary approach) (Peseschkian & Remmers, 2020; Cyrous, 2020), visible in Fig. 2.

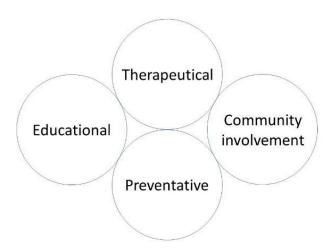


Fig. 2: interdisciplinary and multidisciplinary role of MedEd and PPT

Discussion

3.1. Multidisciplinary and Interdisciplinary mindset

As schematized in Fig. 2, it is possible by summarizing the main characteristics of MedEd and PPT to understand the importance of interdisciplinary and multidisciplinary activities and interventions, which can be planned on the centrality of the four pillars of interaction between MedEd and PPT:

- Education/pedagogy.
- Therapy/intervention.
- Prevention.
- Interaction with the community/society.

By multidisciplinarity we mean the interaction between different disciplines simultaneously, and by interdisciplinarity (or interprofessionalism) we mean the transfer of skills, abilities, knowledge, between different disciplines (Nima Rezaei & Amene Saghazadeh, 2022). Cooperation between MedEd and PPT can be considered through the establishment of multidisciplinary (MDT) and interdisciplinary teams (IDT), which can play active roles in suicide prevention, further interacting with different environments, stakeholders, and subjects (universities, educational providers, hospitals/clinics, communities).

Table 1. Simplification of multidisciplinary and interdisciplinarity team

Team Modality	Function
Multidisciplinary	Interaction between
	professions
Interdisciplinary	Transfer of skills/abilities
	between professions

3.2. Preventative interventions and activities

Curriculum intervention and workload organization, programming a compulsory personal therapy (counselling/psychotherapy) for MHSs and HWs, constant over time (personal therapy cyclic sessions supervision), which allows the development of self-awareness, emotional development, selfreflexivity, as well as direct monitoring of mental well- being, and it can also find its application in favour of students who decide to opt for study paths offered with distance learning / online modality with the possibility of carrying out personal therapy in the same methodology (Gentile & Roman, 2009; Søvold et al., 2021). In addition, peer support activities should be organised with supervised mental well-being monitoring activities carried out by counselling / psychotherapy students (Moe 2020; Chester, 2006). These activities involve supervision by expert personnel, MDT, and IDT, with reference to the therapies carried out by counselling / psychotherapy trainees towards MHSs and HWs. These activities may offer many advantages:

- Cost reduction for MHSs and HWs for mandatory personal therapy, delivered as a supervised internship.
- Distance counselling / psychotherapy activities, also in support of distance learning students, organized through university structures or providers (monthly or three- month evaluation).
- Establishment of MDTs and IDTs involving MHSs and HWs in the cooperation of MedEd and PPT.
- Generation of the awareness of the real existence of the practitioner-patient.
- Increase in the number of peers (MHSs and HWS) available for the training in counselling/psychotherapy for students (with and without supervision).
- Increase in the number of mental well-being practitioners (in departments or areas at risk, and in university departments).
- Increase in the use of PPT in environments with a high migratory flow or multicultural environments.
- Increased use of technology and monitoring and self-monitoring tools (artificial intelligence, face/emotions analysis, performance analysis, reflective journal).

- Integration intervention of counselling/psychotherapy skills training for all programs of the health professions (medical and non-medical).
- Support to MHSs and HWs in the monitoring phase and support of mental wellbeing and suicide prevention.

A further step in suicide prevention is to train and educate HWs and MHSs on epidemiological data, on the prevention supports present in institutions and workplaces, on education to recognise the possible signs of stress or mental illness, education on emotions and feelings, and to educate on the challenge against the stigmatization of mental disease due to social and cultural barriers. MHSs and HWs must thus be informed of the absence of possible disputes or participate in their study path and career path (Klein, 2022; Kusumadewi et al., 2021; Hrovat et al., 2012). Academic and workplace activities useful for the prevention of suicide are identifiable in the following activities:

- Reflective journal.
- Performance analysis.
- Surveillance survey.
- Formal and informal feedback.
- PPT (counselling/psychotherapy).

The reflective journal (reflective practice) is a monitoring tool mainly used in the development of professional practice, knowledge, and skills, in the planning of corrective actions or improvement of the professional / academic path and is a useful tool to increase the level of self-awareness and self- knowledge, which thus allows constant monitoring of oneself also in relation to sensations and emotions (Richard et al., 2010; Cooper, 2019). Peer feedback (formal and informal), survey, and performance analysis (academic and professional), in the context of suicide prevention, can be useful tools for monitoring suicidality, both in MHSs and HWs (Bowersox et al., 2021; Andreotti et al., 2020; Chadha, 2021). MedEd in cooperation with universities and the managerial areas of the workplaces have the task of supporting the organization and methods of using feedback and surveys, making them clear, executable, and interpretable; in support of these three tools that may be used in suicide prevention, artificial Intelligence and facial/emotions analyser software could be proposed (Bernert et al., 2020; Laksana et al., 2017).

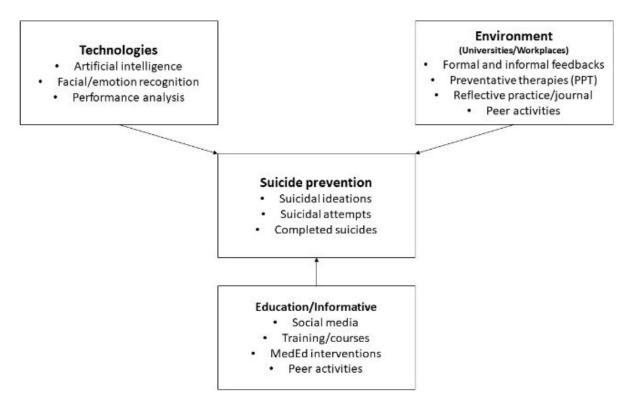


Fig. 3. Outline of the prevention activities

Conclusion

In the objective of the prevention of CSs, SAs, and SIs, MDTs and IDTs based on MedEd and PPT, fit a fundamental role in identifying the best monitoring and preventative systems in a high-risk group such as MHSs and HWs (Hoppen & Morina, 2021; Birni & Eryilmaz, 2022). From what has been described, the mental health of subjects at risk can be monitored to prevent the risk of suicide through the integration of different areas as illustrated in diagram 2:

- Technologies.
- Environment.
- Education/dissemination activities.
- Preventative counselling/psychotherapy modalities.
- Peer activities.

The aims of the interventions and of the organization of support to the MHS and HW, in addition to prevention as a primary objective, are also the generation and monitoring of mental health, interdisciplinary and multidisciplinary support, training, dissemination, and information on mental health and emotions, and against discrimination and stigmatization of mental illness and suicide.

Limits of the manuscript

What is proposed in the manuscript does not evaluate the possible cost-effectiveness ratio, ROI, and the peculiarity of the different academic and health systems, their legislation, their financing, and any preventive pathways already active..

References

- [1]. ANDREOTTI, E.T., IPUCHIMA J.R., CAZELLA, S.C., BERIA, P., BORTONCELLO, C.F., SILVEIRA, R.C. and FERRAO, Y.A. (2020). Instruments to assess suicide risk: a systematic review. *Trends in Psychiatry and Psychotherapy*, 42(3), pp.276–281. doi:10.1590/2237-6089-2019-0092.
- [2]. BERNERT, R.A., HILBERG, A.M., MELIA, R., KIM, J.P., SHAH, N.H. and ABNOUSI, F. (2020). Artificial Intelligence and Suicide Prevention: A Systematic Review of Machine Learning Investigations. International Journal of Environmental Research and Public Health, [online] 17(16), p. 5929. doi:10.3390/ijerph17165929.

- [3]. BISHOP, J., HORTON, G., HU, W. and VOGAN, C. (2018). Supporting Learner Well-being. In John Wiley & Sons, Ltd eBooks (pp. 485–496). https://doi.org/10.1002/9781119373780.ch3
- [4]. BOWERSOX, N.W., JAGUSCH, J., GARLICK, J., CHEN, J.I. and PFEIFFER, P.N. (2021). Peerbased interventions targeting suicide prevention: A scoping review. American Journal of Community Psychology. doi:10.1002/ajcp.12510.
- [5]. CARSON, A.J., DIAS, S., JOHNSTON, A., MCLOUGHLIN, M.A., O'CONNOR, M., ROBINSON, B.L., SELLAR, R.S., TREWAVAS J.J.C. and WOJCIK, W. (2000). Mental Health in Medical Students a Case Control Study Using the 60 Item General Health Questionnaire. Scottish Medical Journal, 45(4), pp. 115–116. doi:10.1177/003693300004500406.
- [6]. CHADHA, A. and KAUSHIK, B. (2021).

 Performance Evaluation of Learning Models for Identification of Suicidal Thoughts. *The Computer Journal*, 65(1), pp. 139–154. doi:10.1093/comjnl/bxab060.
- [7]. CHAN, L.F., SALLEH SAHIMI, H.M. and RAUDHAH BINTI MOKHZANI, A. (2022). A Global Call for Action to Prioritize Healthcare Worker Suicide Prevention During the COVID-19 Pandemic and Beyond. Crisis. doi:10.1027/0227-5910/a000852.
- [8]. CHEHIL, S. & KUTCHER, S.P. (2012). Suicide risk management: a manual for health professionals. Chichester: John Wiley & Sons.
- [9]. **CHESTER, A. and GLASS, C.A.** (2006). Online counselling: a descriptive analysis of therapy services on the Internet. *British Journal of Guidance & Counselling*, 34(2), pp. 145–160. doi:10.1080/03069880600583170.
- [10]. COENTRE, R. and GOIS, C. (2018). Suicidal ideation in medical students: recent insights. Advances in Medical Education and Practice, Volume 9, pp. 873–880. doi:10.2147/amep.s162626.
- [11]. **COOPER, D.B. & COOPER, J.** (2019). *Palliative* care within mental health: ethical practice. New York: Routledge.
- [12]. CYROUS, S. (2020). Positive and Transcultural Psychotherapy. In Encyclopedia of Psychology and Religion. https://doi.org/10.1007/978-3-030-24348-7 9314

- [13]. FALCONE, T., TIMMONS-MITCHELL, J. (2018). Suicide Prevention: A Practical Guide for the Practitioner. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-74391-2
- [14]. **GENTILE, J. P., & ROMAN, B.** (2009). Medical student mental health services: Psychiatrists treating medical students. Psychiatry, 6(5), pp. 38-45. https://pubmed.ncbi.nlm.nih.gov/19724734
- HOPPEN, T. H., & MORINA, N. (2021). Efficacy of positive psychotherapy in reducing negative and enhancing positive psychological outcomes: A meta-analysis of randomised controlled trials. BMJ Open, 11(9). https://doi.org/10.1136/bmjopen-2020-046017
- [16]. HROVAT, A., THOMPSON, L., & THAXTON, S. (2012).Preparing Counselors-in-**Training** for Multidisciplinary Collaboration: Lessons Learned From a Pilot Program. URL: https://www.counseling.org/docs/defaultsourc e/vistas/preparing-counselors-in-training-for multidisciplinary-collaboration.pdf [Accessed: 05.05.2023]
- [17]. IAROVICI, D. (2014). Mental health issues and the university student. Baltimore: The Johns Hopkins University Press.
- [18]. KIRMAYER, L. J. (2022). Suicide in cultural context: An ecosocial approach. In Transcultural Psychiatry (Vol. 59, Issue 1). https://doi.org/10.1177/1363461522107642
- [19]. KLEIN, H.J., McCARTHY, S.M (2022). Student wellness trends and interventions in medical education: a narrative review. Humanities and Soc Sciences Communications, 9 (1). https://doi.org/10.1057/s41599-022-01105-8
- [20]. KOVANDA, O. (2021). Suicidal Personality States: Research and Scientific Perspective. The Global Psychotherapist, Vol. 1, No.1, pp. 62-69. https://doi.org/10.52982/lkj145
- [21]. KUSUMADEWI, A.F., MARCHIRA, C.R., WIDYANDA, W. and WIRASTO, R.T. (2021). Effectivity of Psychotherapy Interventions for Anxiety in Medical Students: A Systematic Review, Open Access Macedonian Journal of Medical Sciences, 9(F), pp. 453-463. doi: 10.3889/oamjms.2021.7244.
- LAKSANA, E., BALTRUSAITIS, T., MORENCY, L.P. & PESTIAN, J.P. (2017). Investigating Facial Behavior Indicators of Suicidal Ideation. 2017 12th IEEE International Conference on Automatic Face & Gesture Recognition (FG 2017). doi:10.1109/fg.2017.96.
- [23]. **LATIFI, R.** (2019). The Modern Hospital. Cham: Springe International Publishing. doi:10.1007/978-3-030-01394-3.

- [24]. MEEKS, L.M. & MURRAY, J.F. (2019). Mental Health and Medical Education. Medical Student Well-Being, pp.17-58. doi:10.1007/978-3-030- 16558-1_2
- [25]. ESKIN, E. (2018). Suicide and culture, BAU Journal - Health and Wellbeing: Vol. 1: Iss. 1, Article 5. URL: https://digitalcommons.bau.edu.lb/hwbjournal /vo l1/iss1/5 [Accessed: 05.05.2023]
- [26]. MOE, F.D. & THIMM, J. (2020). Personal therapy and the personal therapist. Nordic Psychology, pp. 1-26. doi:10.1080/19012276.2020.1762713.
- NAGHAVI, M. (2019). Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. BMJ, p. 194. doi:10.1136/bmj.l94
- REZAEI, N. & SAGHAZADEH. A. (2022). [28]. Introduction on Integrated Science: Multidisciplinarity and Interdisciplinarity in Health. In: Razaei N. (Ed.) Integrated Science book series (IS, volume 6). Springer Nature.
- [29]. **PESESCHKIAN, N.** (1990). Positive psychotherapy: A transcultural and interdisciplinary approach to psychotherapy. Psychotherapy and Psychosomatics, 53(1-4). https://doi.org/10.1159/000288338
- [30]. PESESCHKIAN, H., & REMMERS, A. (2020). Positive Psychotherapy: an introduction. In: Messias E., Peseschkian H., Cagande C. (Eds.) Positive Psychiatry, Psychotherapy and Psychology, (11-32), Springer, Cham (Switzerland). https://doi.org/10.1007/978-3-030-33264-8 2
- [31]. BIRNI, G., & ERYILMAZ, A. (2022). Positive psychotherapy perspective on suicide: Investigating suicidal thoughts and suicide probability. Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG), 11(2), pp. 135-148.
- [32]. RICHARDS, K., CAMPENNI, C. and MUSE-BURKE, J. (2010). Self-care and Well-being in Mental Health Professionals: The Mediating Effects of Self- awareness and Mindfulness. Journal of Mental Health Counselling, 32(3), pp. 247-264. doi:10.17744/mehc.32.3.0n31v88304423806
- [33]. SEO, C., DI CARLO, C., DONG, S.X., FOURNIER, K. & HAYKAL, K.A. (2021). Risk factors for suicidal ideation and suicide attempt among medical students: A meta-analysis. PLOS ONE, 16(12), p.e0261785.
 - https://doi.org/10.1371/journal.pone.0261785
- [34]. SERDIUK, L. (2022). Internal Resources of Personal Psychological Well-Being. The Global Psychotherapist, Vol. 2, No. 2, pp. 17-23. https://doi.org/10.52982/lkj167
- [35]. **SOPER, C.A.** (2018). *The Evolution of Suicide*.

1.003.0050

- Cham Springer International Publishing Springer Nature. https://doi.org/10.1007/978-3-319-77300-1
- [36]. SØVOLD, L. E., NASLUND, J. A., KOUSOULIS, A. A., SAXENA, S., QORONFLEH, M. W., GROBLER, C., & MÜNTER, L. (2021). Prioritizing the Mental Health and Well-Being of Healthcare Workers: An Urgent Global Public Health Priority. Frontiers in Public Health, 9. https://doi.org/10.3389/fpubh.2021.679397
- [37]. **WASSERMAN, D.** (2016). *Suicide: An unnecessary death.* Oxford University Press 01-01. URL:

https://oxfordmedicine.com/view/10.1093/med/9780198717393.001.0001/med-9780198717393 [Accessed: 05.05.2023]

- [38]. WASSERMAN, D. (2021). Strategies in suicide prevention. Oxford Textbook of Suicidology and Suicide Prevention, pp. 421– 426. https://doi.org/10.1093/med/978019883444
- [39]. YUSOFF, M.S.B., MAT PA, M.N., ESA, A.R. and ABDUL RAHIM, A.F. (2013). Mental health of medical students before and during medical education: A prospective study. *Journal of Taibah University Medical Sciences*, 8(2), pp.86–92. doi:10.1016/j.jtumed.2013.03.004