Multi-level suicide prevention programs: Impacts beyond the sum of individual interventions

World Suicide Prevention Day Community Forum, Brisbane
14th September 2018

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Challenges in suicide prevention

- Many suicide prevention programmes lack a holistic approach.
- Suicide prevention is often perceived from a narrow perspective, e.g. not addressing comorbidity and contextual factors.
- In implementing suicide prevention programmes, the quality and intensity of the implementation (e.g. standardisation, targets and indicators), is often not addressed.

_The whole is more than the sum of its parts_

_Aristotle_  
_384-322 BC_
Impact of community based multi-level suicide prevention programmes

- Growing consistency of the effectiveness of community based interventions to improve the care for people diagnosed with depression and simultaneously address awareness and skills in early identification of suicide risk among healthcare and community based professionals (EAAD, NOCOMIT-J)

- Reductions in fatal and non-fatal suicidal behaviour combined up to 32% (Szekely et al, 2013; Hegerl et al, 2013)

- Proven synergistic effects of simultaneously implementing evidence based interventions (Harris et al, 2016)
Community based frameworks: Single versus Multiple Interventions

- Simultaneous implementation of multiple evidence informed interventions is more likely to result in significant reductions of suicide and attempted suicide compared to single interventions.

- In several culturally different countries where multi-level suicide prevention programmes had been implemented, significant reductions were observed in suicide and suicide attempts.

- Synergistic effects, i.e. added value beyond the sum of individual intervention levels or components in isolation, for example the launch of awareness campaign had a positive impact on the uptake of training for community facilitators, and media professionals in particular.

Suicide rates by WHO region

Mental Health Atlas, 2017

- Close to 800,000 people die by suicide every year
- More than e.g. malaria, breast cancer

FIG. 5.2.1 Age-standardized suicide rates per 100,000 population, by region, 2016
Diagnostic and therapeutic deficits in the treatment of depression

Kamenov et al, 2015; Craven & Bland, 2013
From European to Global Implementation

Funding by the EU over 11 years
Implementation of the multi-level intervention programme in the original intervention region (Nuremberg)

Aim:
Improving the treatment of people with depression and prevention of suicidal behaviour

1. Training for General Practitioners
   - Interventions for approx. 150 persons with increased suicide risk
   - Approx. 150,000 leaflets; 25,000 brochures; tv, radio campaigns

2. Training for Community Facilitators
   - More than 2000 community facilitators

3. Awareness campaign for the general public

20% (n=77) of all GPs
The impact of the multi-level intervention programme on suicidal behaviour in the intervention region (Nuremberg) and control region (Würzburg)

Chi² (one-tailed):
- 2000 versus 2001; p< 0.05
- 2000 versus 2002; p< 0.01
- 2000 versus 2003; p< 0.01

Hegerl et al. 2006; 2010
Szolnok Alliance Against Depression: Impact on suicide rates compared to the national suicide rates (p=.017) and a control region (p=.0015) (Szekely et al 2014)
EAAD - Standardised implementation of the multi-level intervention programme

- Simultaneous implementation of the 5 intervention levels (intensity)
- Determine specific targets for each of the intervention levels (reach)
- Combining the objectives of improving the care for people with depression and preventing suicidal behaviour
- Establish local Advisory Groups representing key agencies and professionals involved in the different intervention levels, e.g. GPs, health professionals, community facilitators, such as social workers, police officers, pharmacists, priests, media professionals, and people with lived experience
- Endorsement and promotion of the multi-level intervention programme by patron at launch event and repeated public and media events
How important is standardisation?

- More consistency across regions/countries with high level of fidelity to the original EAAD multi-level model in outcomes relating to suicide and non-fatal suicidal behaviour (e.g. Szekely et al, 2013) compared to regions/countries with low level of fidelity (e.g. Collings et al, 2018)

- More consistency across regions/countries with a combined focus on improving the care for people with depression and preventing suicidal behaviour (e.g. Szekely et al, 2013) compared to regions/countries with a focus on only preventing suicidal behaviour (e.g. Collings et al, 2018)
EAAD - Optimising Suicide Prevention programmes and their Implementation in Europe: From a 4-level to 5-level community based intervention programme

Level 1: Primary care training

Level 2: General public awareness campaign

Level 3: Training for CFs and HCPs

Level 4: Offers for high risk groups

Level 5: Restricting access to lethal means

Improving the care for depression and preventing suicidal behaviour
iFightDepression programme

- ifightdepression.com – European information and awareness website on depression and suicidal behaviour; currently available in 12 languages

- Aims to raise awareness and improve knowledge and attitudes regarding depression and suicidal behaviour and to promote help-seeking and positive mental health
Research paper

Effectiveness of General Practitioner training to improve suicide awareness and knowledge and skills towards depression

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Impact pre-post training and at 3-months follow-up

- The training programme had a significant effect on the GPs’ confidence in dealing with depression and suicide ($p<0.001$). Immediately after training, the GPs’ level of confidence significantly improved ($p<0.001$) and this improvement was still present after three months follow-up ($p<0.001$).

- The training programme resulted in improved knowledge and attitudes regarding depression and suicide and their prevention and treatment. However, at 3 months follow-up attitudes towards depression and suicide prevention had returned to baseline levels.

- Overall, consistency in training impacts in multiple countries, such as Germany, Hungary and Portugal.
Outcomes of Depression and Suicidal Behaviour Awareness & Skills training among Community Facilitators using a Train-the-Trainer approach

Consistently positive effects of Depression & Suicidal Behaviour Awareness and Skills Training among broad range of Community Facilitators in terms of improved knowledge, attitudes and confidence, including:

- Social workers
- Police Officers
- Clergy
- Counsellors
- Managers
- Pharmacists
- Teachers
- Carers for older people
Following the OSPI gatekeeper training the police officers showed significantly more positive attitudes towards depression (baseline: M=32.91, SD=4.61, post-training: M=35.07, SD=4.82, p<.001). Effect size: r=0.51 (large effect)
Outcomes of training with police officers

*Competency in recognising suicide risk*

Reported confidence increased significantly following the training programme (baseline: $M=4.45$, $SD=1.82$, post-training: $M=5.82$, $SD=1.80$, $p<.001$). Effect size: $r=0.66$
Feedback and experience of participants Gatekeeper training for police officers in Limerick

“Good course and good interaction. Pity I didn’t get a course like this years ago as it would have helped”

“Excellent and much-needed course”

“Good course and very useful in the current climate”
Outcomes of general public awareness campaign

After the awareness campaign, participants in the intervention regions showed significantly less personal depression stigma than respondents in the control regions.

Public awareness campaigns can contribute to improved attitudes and knowledge about depression in the general public and produce synergistic effects, in particular when the dissemination of awareness campaign materials is simultaneously reinforced by other intervention levels of a multi-level intervention programme.
Proven synergistic effects of simultaneously implementing evidence based interventions (Harris et al, 2016)
Synergistic effects – Examples from EAAD

Synergistic interactions in complex interventions (either single or multi-level) achieve an impact that is greater than the sum of effects of interventions provided in isolation, e.g.:

- Media professionals attending launch event, were more likely to attend training for media professionals
- People with lived experience facilitated the public awareness campaign and informed their GP
- Community facilitators attending public awareness events reinforced the campaign messages and motivated other community facilitators to take up the depression and suicide awareness training.

(Harris et al, 2016)
30th World Congress of the International Association for Suicide Prevention
Sept 17th-21st 2019

‘Breaking Down Walls and Building Bridges’

www.iasp2019.com
http://www.eaad.net/