Parnassia Groep
Specialist in geestelijke gezondheid

Symposium uitnodiging 10 september 2015

# Een einde maken aan suïcides

## Versterken samenhang in preventie – training – behandeling

### World Suicide Prevention Day 10 september 2015

- symposium 'Een einde maken aan suïcides' , versterken samenhang in preventie – training – behandeling
- Locatie: Louis Hartlooper Complex, Tolsteegbrug 1, 3512 ZN Utrecht
- Kosten
  De kosten voor dit symposium, inclusief lunch en informele borrel zijn: € 95
- Accreditatie is aangevraagd bij NVvP, FGzPt, RSV

### Een einde maken aan suïcides

Nog steeds neemt jaarlijks het aantal suïcides toe. Hoe kunnen we deze stijging naar beneden ombuigen? Op dit symposium wordt het belang van, als ook de ontwikkelingen in, suïcide preventie vanuit diverse invalshoeken belicht.

Kijk hier voor:
- het programma
- Meet the Experts
- het inschrijfformulier
- routebeschrijving

Aanmelden via de Parnassia Academie

### Samen gaan we het aantal suïcides verminderen!

De laatste jaren is er in Nederland een grote toename van het aantal suïcides. Om het aantal suïcides te verminderen is preventie op velerlei terreinen nodig. Meer training van gatekeepers, betere veiligheid bij spoorweg emplacementen, lastigere toegankelijkheid van bepaalde middelen waarmee je kunt suïcideren, betere herkenning en behandeling, enzovoort. Wat kan anders, wat moet beter? Daarover gaan we graag in gesprek tijdens dit symposium waar belangrijke spelers van suïcide preventie in Nederland aanwezig zijn. Werken aan een toekomst met betere preventie, eerdere signalering, betere behandeling, maar dit kan alleen als we het samen doen!

### Doelgroep

Dit symposium richt zich op:
- Hulpverleners van verschillende disciplines die te maken hebben met suïcide preventie,
- Managers en bestuurders van ggz-instellingen die betrokken zijn bij suïcide preventie,
- Beleidsmakers, van ministerie tot gemeente,
- Beleidsbepalers bij zorgverzekeraars.

**Dit symposium wordt georganiseerd ter gelegenheid van World Suicide Prevention Day. Ieder jaar wordt op 10 september speciale aandacht gevraagd voor de noodzaak van suïcide preventie.**

# Effectiveness of Gatekeeper Suicide Prevention Training on knowledge, attitudes and referral behaviour. A Randomised Controlled Trial.

GGZ Friesland

GGD Amsterdam

Trimbos instituut
Netherlands Institute of Mental Health and Addiction

VU VRIJE UNIVERSITEIT AMSTERDAM

# Epidemiology in the Netherlands

- 1,700 people commit suicide annually *(1,753 in 2012, CBS)*
- 100,000 attempt suicide *(Trimbos 2006, 2011)*
- 14,000 of them contact the emergency department

  *(Kerkhof et al 2007; RIVM 2008)*
- 462,500 suffer from suicidal ideation *(Trimbos 2006, 2011)*

- The corresponding disease burden equals 231,000 disability adjusted life years (DAILY's) *(RIVM 2011)*

# The problem

- Suicide is the fatal outcome of a process starting with suicidal thoughts or non-fatal suicidal behaviour.

  *Hawton K, van Heeringen K. Suicide. Lancet 2009;373:1372–81*

- To prevent a fatal outcome it is important for people at risk to have access to care and treatment as early as possible.
- Unfortunately, many suicidal people who are at risk do not seek or receive treatment. This inclination not to seek help is one of the core symptoms of the suicidal syndrome
  - They don't expect that treatment could help them
  - They have feelings of shame and fear of stigma

  *Bruffaerts R, Demyttenaere K, Hwang I, Chiu WT, Sampson N, Kessler RC, et al. Treatment of suicidal people around the world. Br J Psychiatry 2011;199:64-70.*

# Gatekeepers

- Education and awareness prevention strategies have been developed.
- As part of selective prevention these programs are directed both at **primary care physicians** and at **community facilitators**.
- Both groups can be trained as gatekeepers.
- The first group is referred to as **designated** gatekeepers, the second one as **emergent** gatekeepers.
- Potential gatekeepers – emergent or designated - are defined as people whose contacts with vulnerable people provide opportunities to identify at-risk individuals and to direct those people to appropriate assessment and treatment

*Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, et al. Suicide prevention strategies: a systematic review. Jama. 2005;294:2064-74.*

- In 1983 and 1984 all GPs on the Swedish island of **Gotland** were trained in the diagnosis and treatment of depression. In the two following years the prescriptions for anti-depressants rose by 50% while the suicide rate declined by 60%

*Rutz W (2001). Preventing suicide and premature death by education and treatment. J Affect Disord. 2001 Jan;62(1-2):123-9.*

- In the **US Air Force** the suicide rate was reduced by 33% following a large-scale program including intensive gatekeeper education.

  *Knox KL, Litts DA, Talcott GW, Feig JC, Caine ED. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. BMJ. 2003;327:1376-1378.*
  *Knox KL, Pflanz S, Talcott GW, Campise RL, Lavigne JE, Bajorska A, Tu X, Caine ED. (2010). The US Air Force suicide prevention program: implications for public health policy. Am J Public Health. 2010 Dec;100(12):2457-63.*

- The **Nuremberg** Alliance Against Depression (NAAD) initiative was followed by a 26% reduction in the number of suicide attempts. A two-year community intervention to combat depression was implemented in Nuremberg (480,000 inhabitants) and compared to a control condition (Würzburg, 270,000 inhabitants)

  *Hegerl U et al (2006) The alliance against depression: 2-year evaluation of a community-based intervention to reduce suicidality, Psychological Medicine, 36 (9), 1225-1233*

# Summary

- Gatekeeper training is seen as an extremely promising method to prevent suicide

  *Isaac M, Elias B, Katz LY, Belik SL, Deane FP, Enns MW, Sareen J. Gatekeeper training as a preventative intervention for suicide: a systematic review. Can J Psychiatry. 2009;54:260-8.*

- UN and WHO stated in their reports that training of gatekeepers is an important and promising prevention strategy for people at risk

  *United Nations Department for Policy Coordination and Sustainable Development. Prevention of suicide: guidelines for the formulation and implementation of national strategies. New York (NY): United Nations; 1996*

  *Office of the Surgeon General (US, & National Action Alliance for Suicide Prevention (US. (2012). 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action: A Report of the US Surgeon General and of the National Action Alliance for Suicide Prevention.*

# Limitations

- Effects are valid in specific conditions or locations
- Owing to the combination of activities, it is unclear which effect can be attributed to the training of GPs or to the gatekeepers or to the synergetic effect of interventions
- Although gatekeeper training is being implemented across the world the efficacy of this intervention has not been fully demonstrated in a RCT

*Isaac M, Elias B, Katz LY, Belik SL, Deane FP, Enns MW, Sareen J. Gatekeeper training as a preventative intervention for suicide: a systematic review. Can J Psychiatry. 2009;54:260-8.*

*Sareen J, Isaak C, Bolton SL, Enns MW, Elias B, Deane F, ... & Katz LY. Gatekeeper training for suicide prevention in First Nations community members: a randomized controlled trial. Depression and anxiety 2013;30:1021-29.*

- Is gatekeeper training effective in enhancing relevant skills?
- Does the intervention impact on rates of (attempted) suicides?
- Is the intervention cost-effective relative to routine medical care?

# GPS project
## (2012 – 2016)

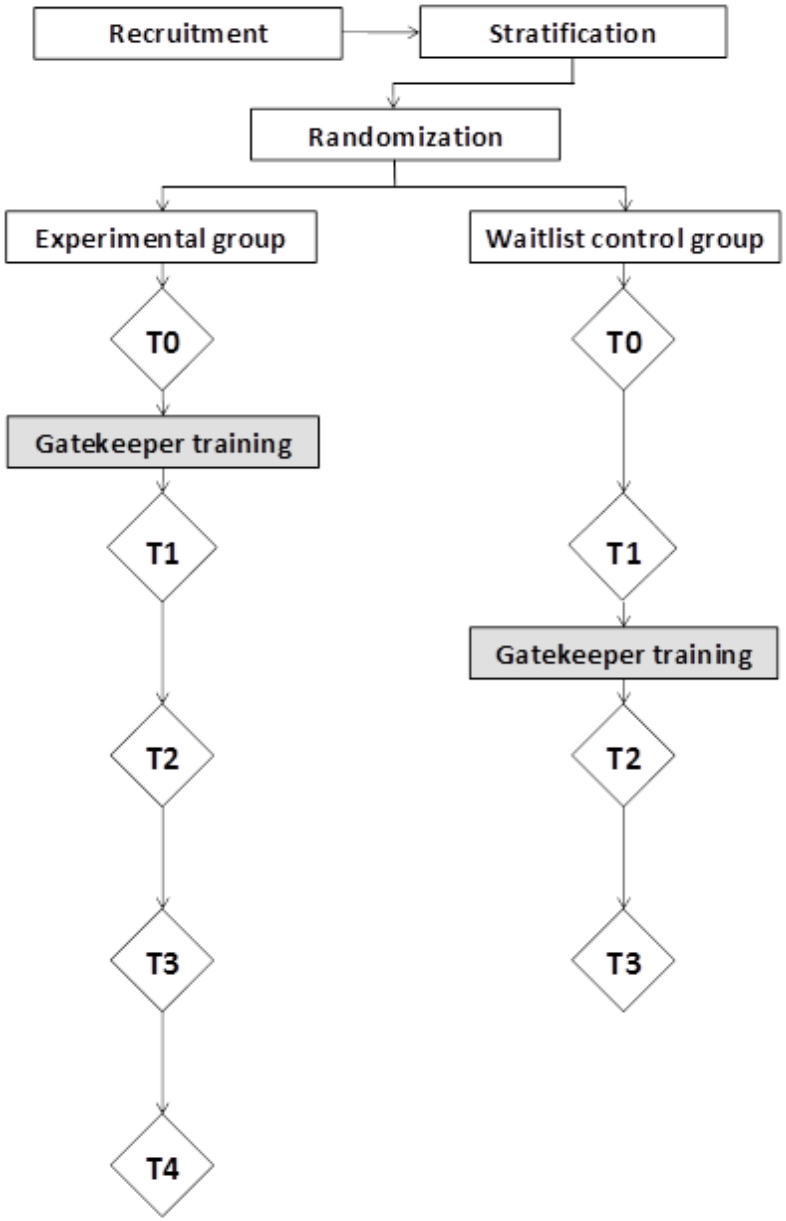
# Trial objectives and purpose

- The effectiveness of the gatekeeper training will be evaluated in a **randomised controlled trial**: recipients of the training versus a wait-list control group of gatekeepers who receive the training three months later.
- It is hypothesized that the gatekeeper training will be **effective compared to a waitlist control condition** in enhancing relevant knowledge, attitudes, skills and referral behaviour.
- A comparison between the experimental and waitlist groups will be made with respect to **professional competence** to communicate about and identify suicidality and to make adequate referrals to the GP or to specialised mental health care services.

# Design

RCT, two parallel groups (waitlist control)

2 * 270 participants



# The intervention

- Didactical concept of the training:  Talk, lecture and intensive role playing

  *Cross WF, Seaburn D, Gibbs D, Schmeelk-Cone K, White AM & Caine ED. Does practice make perfect? A randomized control trial of behavioral rehearsal on suicide prevention gatekeeper skills. The journal of primary prevention, 2011;32:195-211.*

- Using actual experiences of the participants if possible
- Including personalized feedback.
- Learning is seen as a process, concepts are derived from and modified by experience

  *Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. FT Press.*

- A skill is a combination of abilty, knowledge and experience

  *Boyatzis, R. E., & Kolb, D. A. (1995). From learning styles to learning skills: the executive  skills profile. Journal of Managerial Psychology, 10(5), 3-17.*

- Every participant will be trained in skills to engage with and motivate suicidal people to talk about their problems.
- The number of attendants per training session should not exceed sixteen persons, with two trainers in charge.

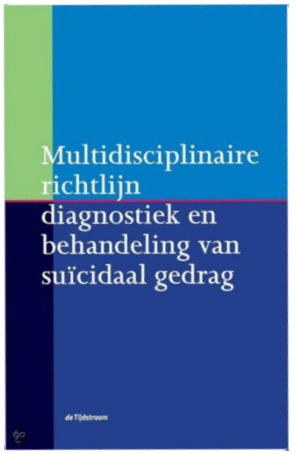
# Course content

- Introduction: participants introduce themselves, by sharing personal and professional **experiences** with respect to suicidal behaviour

  *Aim: to activate existing knowledge, attitudes and skills*

- Short **lecture** on the main aspects of suicidal behaviour and associated biological, psychiatric and psychological processes. Based on key concepts of the Dutch Multidisciplinary Guideline for the Assessment and Treatment of Suicidal Behaviour

  *Aim: to increase knowledge concerning suicidal behavior*




- Through **role playing** the participants will be trained in elementary skills required for listening to and talking with suicidal people and motivating them to seek help.

  *Aim: To enhance skills in motivating people for referral*

- Participants will be asked to reflect on learned skills and obtained knowledge. Specific attention will be given to **referral routes** and opportunities for future consultation by other experts.
- *Aim: To consolidate obtained knowledge, attitude and skills*

# Outcome measures

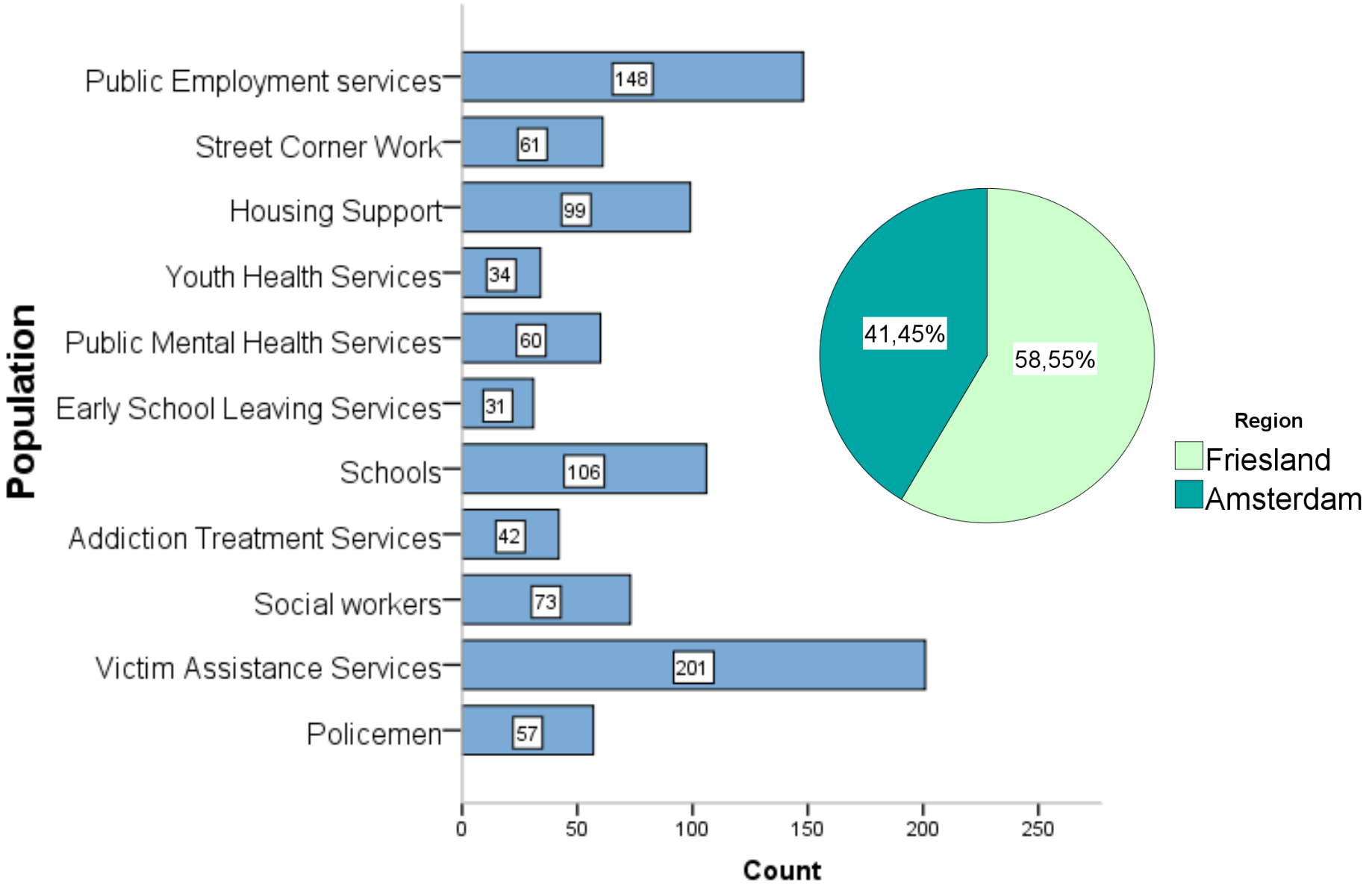
- Outcome measure is competence
  - to identify suicidality
  - to communicate about suicidality
  - to make adequate referrals to the GP (by gatekeepers) and to specialized mental health care (by GPs)

- ATTS: Questionnaire on Attitudes Towards Suicide

  *Renberg ES, Jacobsson L (2003). Development of a questionnaire on attitudes towards suicide (ATTS) and its application in a Swedish population. Suicide Life Threat Behav. 2003 Spring;33(1):52-64.*

- Assessing actual referral behavior during the preceding three months with questions concerning number of contacts and time invested

# Randomisation for N = 912



# Respons rate 67%  (N = 612)

| N = 612 | | | |
|---|---|---|---|
| | Experimental | Control | |
| Female | 75,5% | 74,8 | ns |
| Age | 41 | 41 | ns |

# Native country

| | Region | |
|---|---|---|
| | Friesland | Amsterdam |
| | Count | Count |
| | 26 | 28 |
| Africa | 1 | |
| Austria | 1 | |
| Belgium | 2 | |
| Canada | | 1 |
| China | 1 | |
| Croatia | 1 | |
| Cuba | 1 | |
| Curacao | 1 | |
| England | | 1 |
| Ethiopia | | 1 |
| Frans-Guyana | 1 | |
| Germany | 2 | 1 |
| Indonesië | 1 | |
| Iran | 2 | |
| Iraq | 2 | 1 |
| Morocco | | 5 |
| Russia | 1 | |
| Serbia | | 2 |
| Sri Lanka | 1 | |
| Suriname | 6 | 14 |
| Tanzania | | 1 |
| Thailand | 1 | |
| Turkey | 1 | 1 |

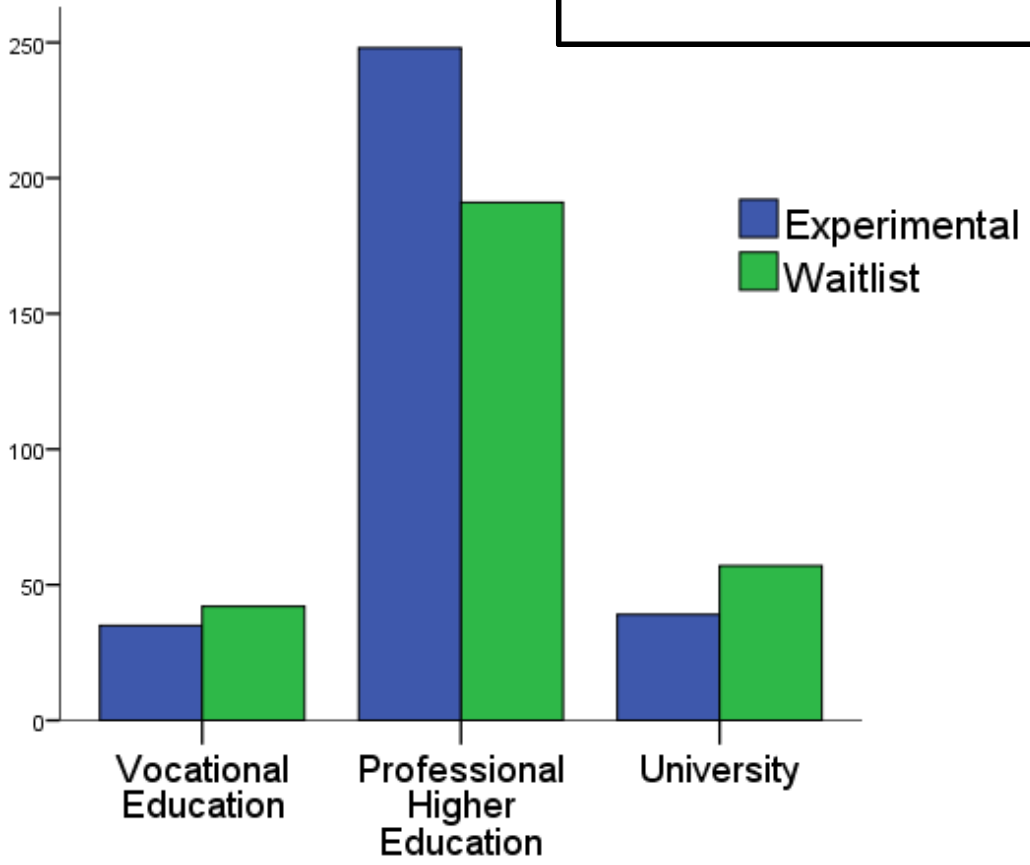
| N = 612 | | | |
|---|---|---|---|
| | Experimental | Control | |
| Native Dutch | 92% | 90% | ns |

# Education

**Level of education * Condition Crosstabulation**

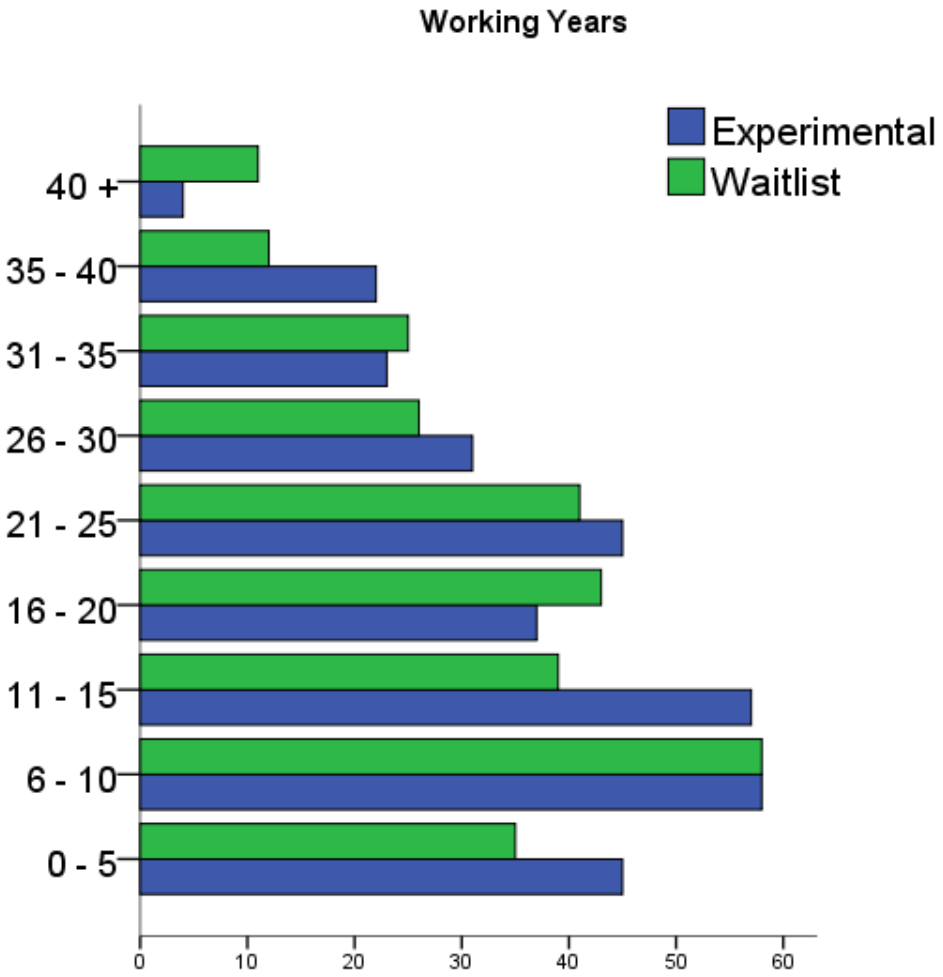
Count

| | Condition | | |
|---|---|---|---|
| | Experimental | Waitlist | Total |
| Vocational Education | 35 | 42 | 77 |
| Professional Higher Education | 248 | 191 | 439 |
| University | 39 | 57 | 96 |
| | 322 | 290 | 612 |



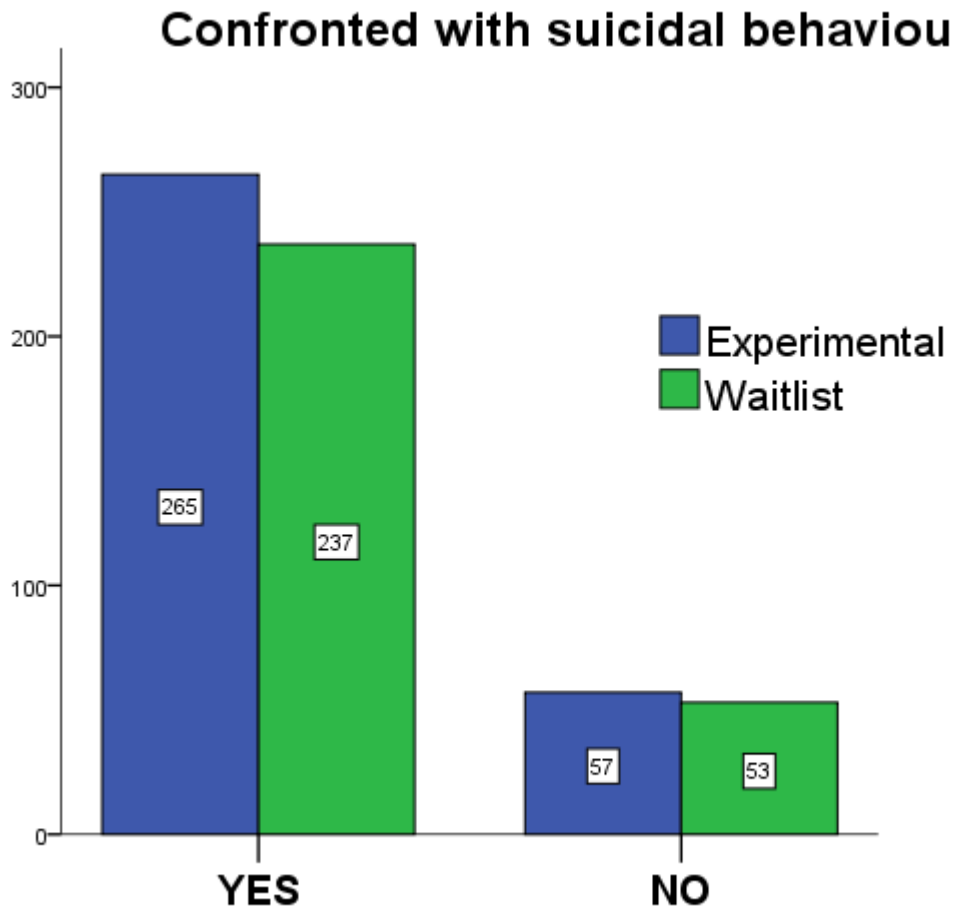
# Work

| N = 612 | | | |
|---|---|---|---|
| | Experimental | Control | |
| Working Years | 17,4 | 17,9 | ns |



# Suicidal Behaviour

| N = 612 | | | |
|---|---|---|---|
| | Experimental | Control | |
| Suicidal Behaviour | 82,3% | 81,7% | ns |




| | |
|---|---|
| Patiënt | 141 |
| Colleague | 43 |
| Friend | 58 |
| Man or wife | 2 |
| Parent(s) | 6 |
| Sibling | 1 |
| Child | 0 |
| Other person | 77 |

# Results

- Training aimed at changes in
  - *Knowledge*
  - *Attitude*
  - *Behaviour*

- Changes were measured with self-report
  - ATTS (knowledge and attitude)
  - Referral Questionnaire (behaviour)

# ATTS

- Questionnaire on Attitudes Towards Suicide
- Developed by Renberg and Jacobsson
- Consists of 37 items covering
  - knowledge to suicidality
  - attitudes to suicidality
- Scored on a five point Likert scale
- In a systematic review (Kodaka, 2011) the ATTS is mentioned as the most feasible and valid instrument

*Renberg ES, Jacobsson L. Development of a questionnaire on attitudes towards suicide (ATTS) and its application in a Swedish population. Suicide Life Threat Behav. 2003;33:52-64*

*Kodaka M, Poštuvan V, Inagaki M, Yamada M. A systematic review of scales that measure attitudes toward suicide. International journal of social psychiatry 2011;57:338-61.*

# Example of questions

1. It is always possible to help a person with suicidal thoughts.
2. Suicide can never be justified.
3. Taking one's own life is among one of the worst things to do to one's relatives.
4. Most suicide attempts are impulsive actions (by nature).
5. Suicide is an acceptable means to terminate an incurable disease.
6. Once a person has made up his/her mind about taking his/her own life no one can stop him/her.
7. Many suicide attempts are made because of revenge or to punish someone else.
8. People who take their own lives are usually mentally ill.
9. It is a human duty to try to stop someone from dying by suicide.
10. When a person dies by suicide it is something that he/she has considered for a long time.
11. There is a risk of evoking suicidal thoughts in a person's mind if you ask about it.
12. People who make suicidal threats seldom complete suicide.
13. Suicide is a subject that one should not talk about.
14. Loneliness could for me be a reason to take my life.
15. Almost everyone has at one time or another thought about suicide.

# Results from ATTS

- For experimental group most items are moving in expected direction
- But also: Most differences not significant
- Key message in Gatekeeper training
  - **Knowledge**
    - *People don't become suicidal by asking and talking about suicidal thoughts*
  - **Attitude**
    - *Whatever your profession is: Make contact with people at risk and listen and talk to them*

# Results ATTS

**ATTS 11: Knowledge**
There is a risk of evoking suicidal thoughts in a person's mind if you ask about it.

**ATTS 30: Attitude**
I am prepared to help a person in a suicidal crisis by making contact.

Experimental

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | | | |
| ATTS 11 | ,199 | ,741 | ,056 | ,089 | ,309 | 3,561 | 175 | ,000 |
| ATTS 30 | -,108 | ,672 | ,051 | -,208 | -,008 | -2,132 | 175 | ,034 |

| | | Not agree | Neutral | Agree | |
|---|---|---|---|---|---|
| ATTS 11 | T0 | 79 | 16 | 5 | |
| | *T1* | *88* | *11* | *1* | |
| ATTS 30 | T0 | 2 | 10 | 88 | |
| | *T1* | *1* | *6* | *93* | |

# Results from referral questions

- For experimental group most items are moving in expected direction
- But also: Most differences are not significant
- Central messages in Gatekeeper training
  - **Knowledge**
    - *There are helplines for people (113 in the Netherlands)*
  - **Attitude**
    - *Show compassion and stay involved, if possible*

# Referral questions

I don't really want to die, I don't want to go to the general practitioner just yet
*You can always call anonymously to the help line, have a look at 113 online*

I see now that I don't really want to die, can we leave it at that?
*I think it's wise if we talk further another time, I care about you and I really want to make sure that you keep doing well*

Experimental

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | | | | 95% Confidence Interval of the Difference | | | | |
| | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | | | |
| 28 | -,511 | 1,957 | ,147 | -,802 | -,220 | -3,467 | 175 | ,001 |
| 29 | -,347 | 1,360 | ,103 | -,549 | -,144 | -3,380 | 175 | ,001 |

| | | Not agree | Neutral | Agree | |
|---|---|---|---|---|---|
| 28 | T0 | 3 | 11 | 86 | |
| | *T1* | *3* | *3* | *94* | |
| 29 | T0 | 40 | 17 | 43 | |
| | *T1* | *19* | *13* | *68* | |

# No Results referral behaviour

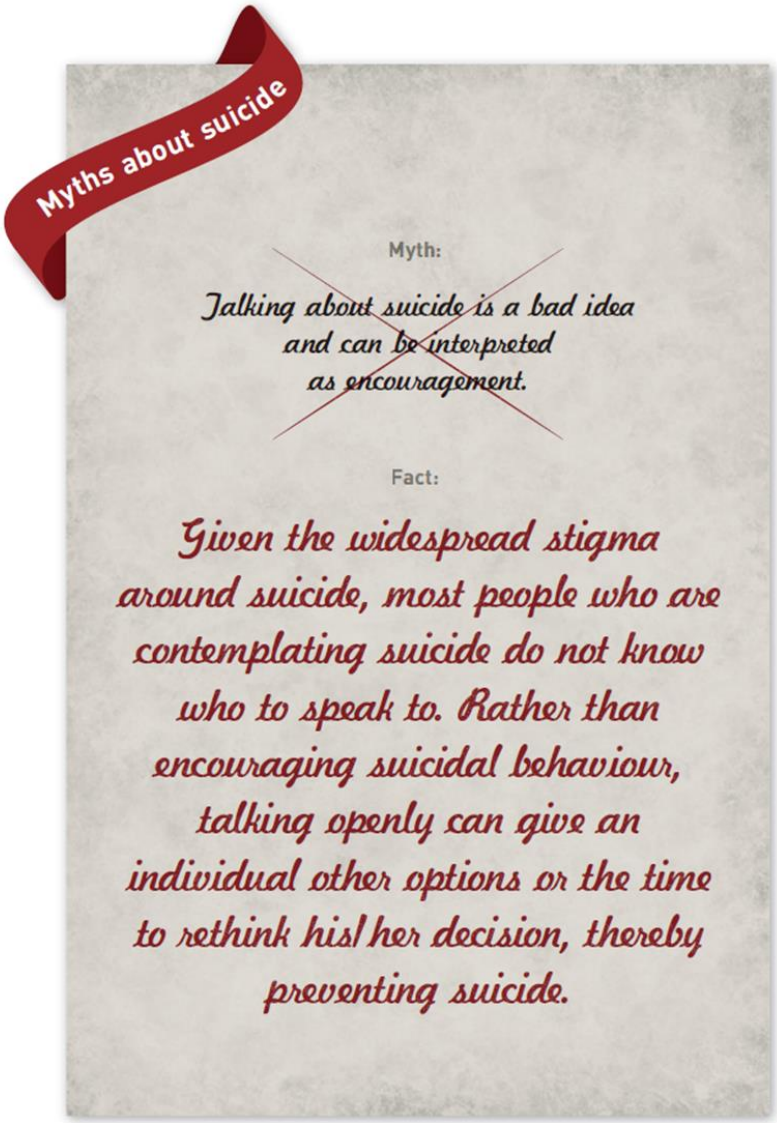
- No significant changes found in referral **behaviour**
  - In frequency of talks with people at risk
  - In frequency of people referred
- That means, no effects in case-finding

How often have you, in the last 4 weeks, spoken to someone with suicidal thoughts? Please specify how many people.

How many times have you, in the last four weeks, referred someone to the general practitioner? Please specify the number of people.

# Summary study 1

- Significant change in competencies in
  - Relevant knowledge
  - Attitudes
- No changes in frequency contacts and referral behaviour at three months
- No differences found between groups
- Gatekeepers learned that talking with people at risk is important and not a bad idea



# Weaknesses

- There could be a  spill-over effect (contamination) from trained gatekeepers to their colleagues. This is a consequence of randomization of individuals within a organization. This can reduce effect-sizes.
- Outcome measures are proximal and restricted at the level of competencies of trained gatekeepers. A next step would be to measure distal effects, the impact of trained gatekeepers on a population.
- Measuring methods are all self-reported. Inaccuracy can be the result of recall bias. Social desirable answering may be present. The timeframe of the adherence recollection period can also affect the accuracy of the recall.

# Strengths

- A big sample (N=912)
- First RCT at an individual level
- Participants included in this study differs from each other with respect to education or affiliation. Effects found in this broad population can strengthen our conclusions and enhances feasibility.
- The differences in participants offers  an opportunity to explore relationships between this type of gatekeeper training and type of participants.

# STUDY 1

Does training of Gatekeepers and GPs improve professional competencies and skills?

# STUDY 2

Does the training of gatekeepers / GPs lead to fewer suicide attempts and suicides?

# Design

- Comparing changes in numbers of suicide attempts between
  - trained regions
  - control condition (all other regions in the Netherlands)

- Data collected by emergency departments
  - *4 EDs in Friesland*
  - *6 EDs in Amsterdam*

# Intervention regions  Control region

**Amsterdam**
urban characteristics
765,000 inhabitants

**Friesland**
mainly rural area
650,000 inhabitants


Together these two regions cover an area in which about 8 percent of the Dutch population lives

# STUDY 3

How cost-effective is training of gatekeepers / GPs?

# Design

- In STUDY 1 the providers of the training for gatekeepers and GPs are surveyed about the costs of providing the training (hours worked and materials used)

- From STUDY 2 we calculate how many quality adjusted life years (QALYs) are gained in one year thanks to the intervention

- Finally, the cost data and DALYs (disability adjusted life years) avoided are combined in an econometric model to produce incremental cost-effectiveness ratios (ICERs)

# In conclusion


- Gatekeeper training is effective in changing knowledge and attitudes
- But no changes in referral behaviour at a three month interval
- Study 2 will show distal effects
- Study 3 will clearify cost-effectiveness

# GPS: Gatekeepers to Prevent Suicide

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