Classification in the 21st century: Going beyond DSM IV and ICD

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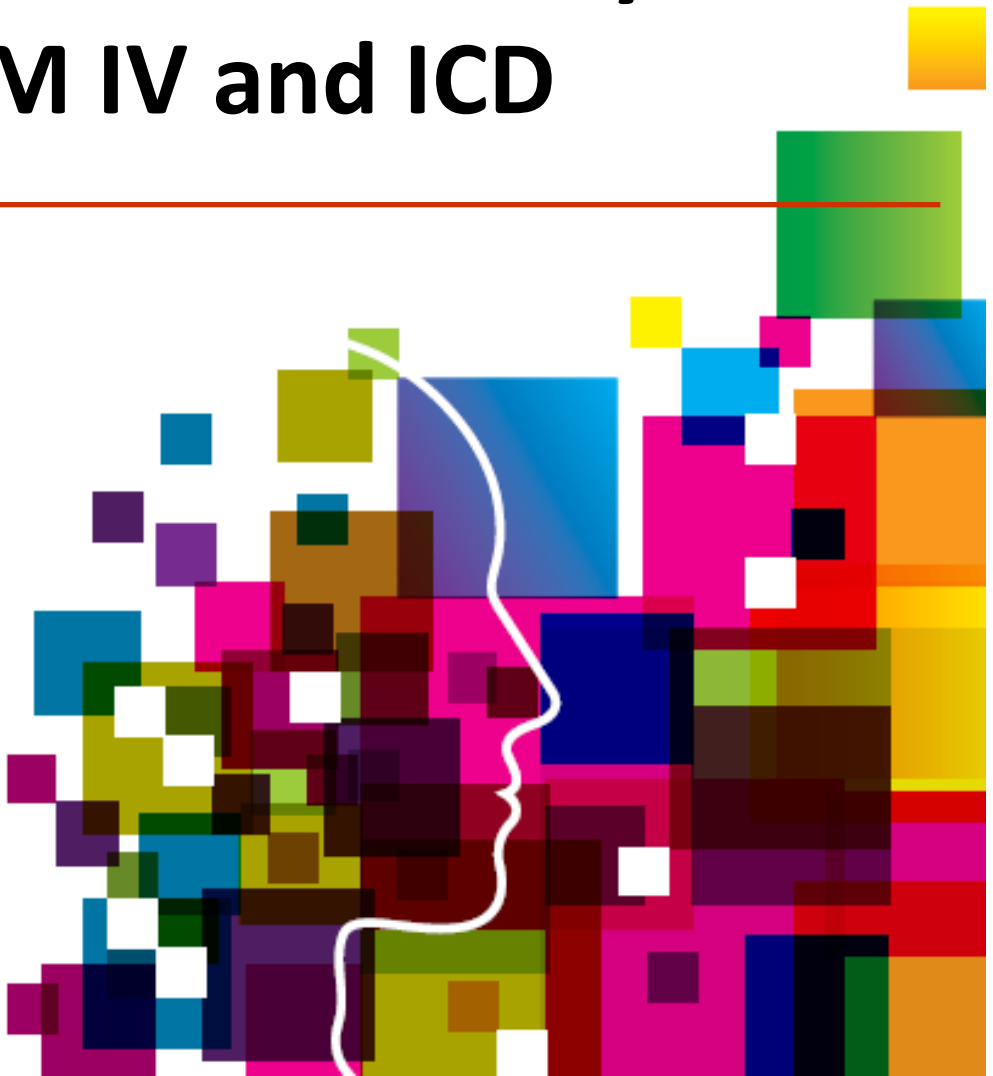


Overview of presentation

1. Background: Suicidal behaviour and WHO
2. Parasuicide, DSH and Non-Fatal Suicidal Behaviour
3. DSM-V and Non-Suicidal Self-Injury (NSSI)
4. Suicide in the ICD-11
5. Conclusions

Learning from a master and dear friend… Vienna, 1985

The WHO/EURO Multicentre Study on Suicidal Behaviour

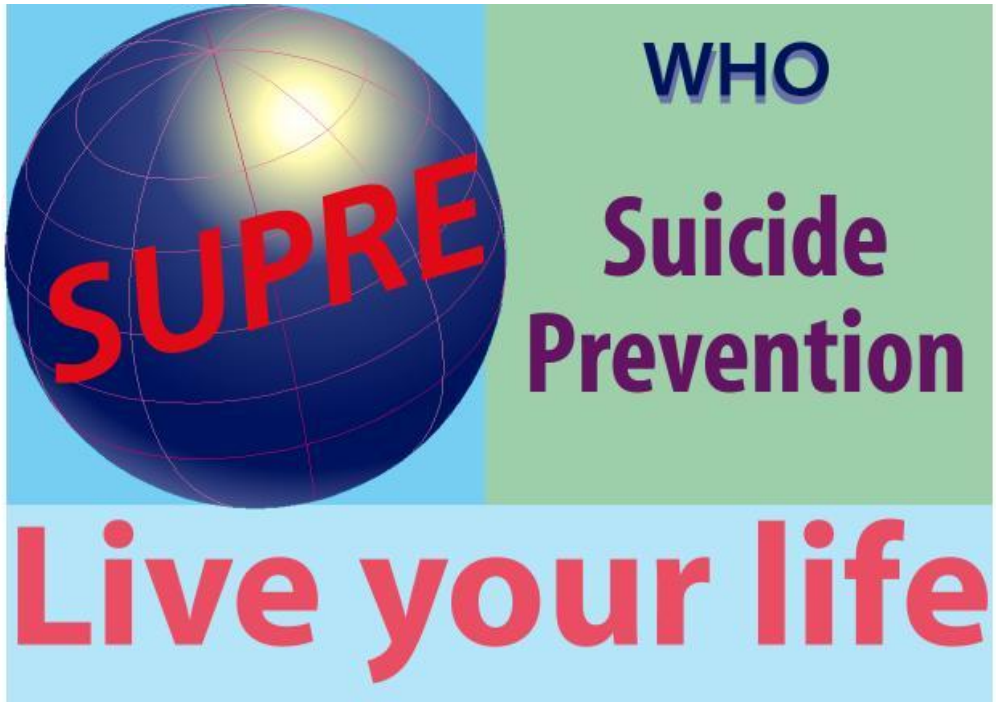
Keith Hawton
Armin Schmidtke
UnniBille-Brahe
Danuta Wasserman
JoukoLonnqvist
Tore Bjerke
Jose' SampaioFaria
Diego De Leo
EllinorSalander-Renberg
Konrad Michel

Announced in 1986, started on the field in 1988. It changed its original name (Study on Parasuicide) in 1999, in Athens. Ended in 2001, after having involved 35 centres. Originated *circa* 250 publications.

Steering Group:

1. *UnniBille-Brahe*
2. *Steven Platt (up to 1991)/Diego De Leo*
3. *Ad Kerkhof*
4. *Armin Schmidtke*

SUicidePREvention Campaign, 2000



WHO Activities / Action plan 2001-2005

- Suicide mortality surveillance
- Production/dissemination of information
- SUPRE-MISS (Multisite Intervention Study)
- Technical support to countries

The Launch of the WHO SUPRE-MISS Study, Brisbane, 2001

WHO/SUPRE-MISS Study

(Bertoloteet *al*, *Psychol Med,* 2005)

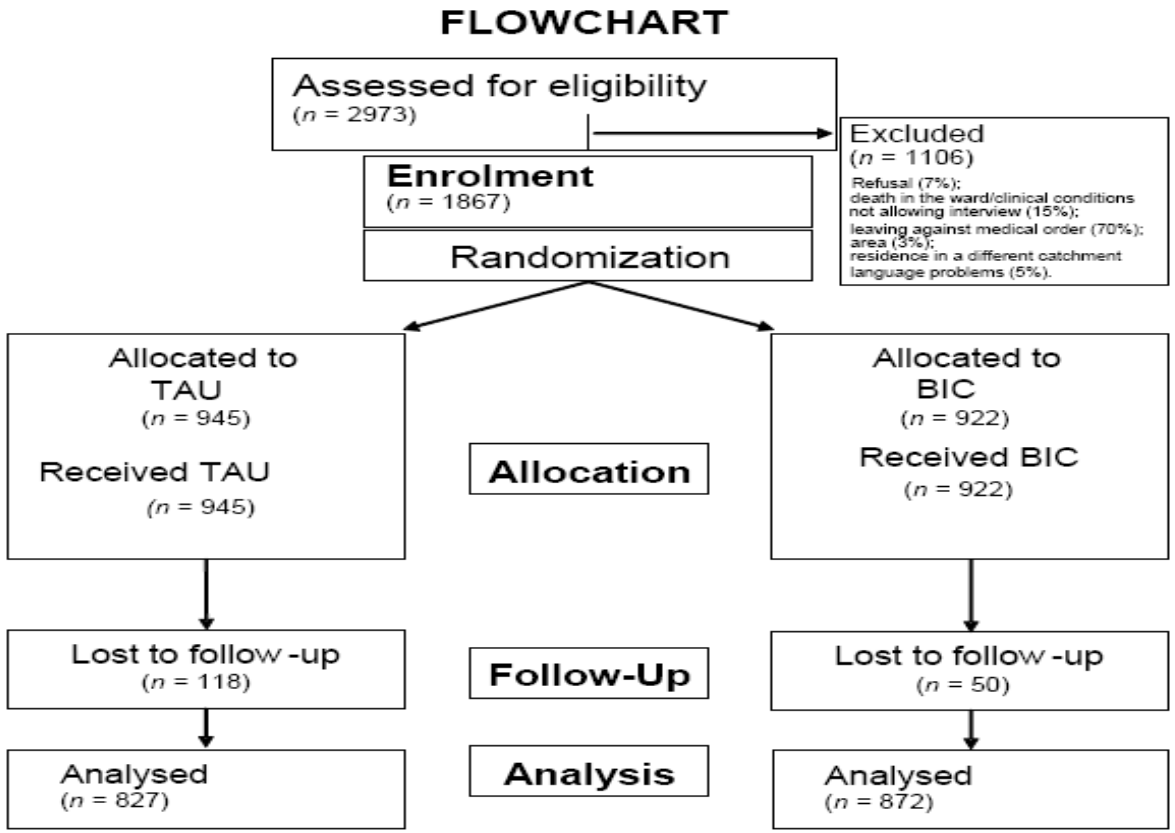
*CountrySs ideation**	*plans**	*suicide suicide**	*suicide attempted*	
Australia (Brisbane)	11,572	14.9%	4.4%	4.2%
Estonia (Tallin)	498	12.4%	5.4%	3.6%
Sri Lanka (Colombo)	6707.3%	1.5%	2.1%	
Brazil (Campinas)	516	18.6%	5.2%	3.1%
Iran (Karaj)	504	14.1%	6.7%	4.2%
Viet Nam (Hanoi)	2,266	8.9%	1.1%	0.4%
S.Africa (Durban)	500	25.4%	15.6%	3.4%
India (Chennai)	500	2.6%	2.0%	1.6%
China (Yuncheng)	503	18.5%	7.4%	2.4%

*lifetime

WHO/SUPRE-MISS Study

(Fleischman *et al*, *Bull WHO,* 2008)

Fig. 1. **Flowchart of subjects in the randomized controlled trial: TAU and BIC arms**



WHO/SUPRE-MISS Study

(Fleischman *et al*, *Bull WHO,* 2008)

Table 2. Mortality of subjects at 18-month follow-up

Status	TAU *N* = 827		BIC *N* = 872		$\chi 2$	*P*-value
	(*n*)	(%)	(*n*)	(%)		
Died of any cause	22	2.7	11	1.3	4.36	0.037
Died by suicide	18	2.2	2	0.2	13.83	< 0.001

TAU, treatment as usual; BIC, brief intervention and contact.

WHO/SUPRE-MISS: After-care of suicide attempters

- **Suicide mortality** at 18 months significantly reduced in subjects treated with BIC compared to TAU *(Fleischmann et al, 2008).*

- **Repeats of non-fatal suicidal behaviour** at 18 months unchanged in the two groups *(Bertolote et al, 2010).*

The clustering of different types of attempters

Reasons for apparent failure in affecting suicidal behaviour repeats could be due to:

- the presence of subject with or without suicide intention,
- the presence of multiple attempters,
- the impact of alcohol abuse,
- the number of borderline patients,
- the number of adolescents,
- the number of adolescents with history of repeated attempts *(Bertolote et al, 2010; Hawton, 2010).*

Suicidal Behaviour: Definitional Issues

Ideal Definitions of Suicide-related acts

- Theory neutral
- Descriptive
- Free of value judgement and culturally sensitive

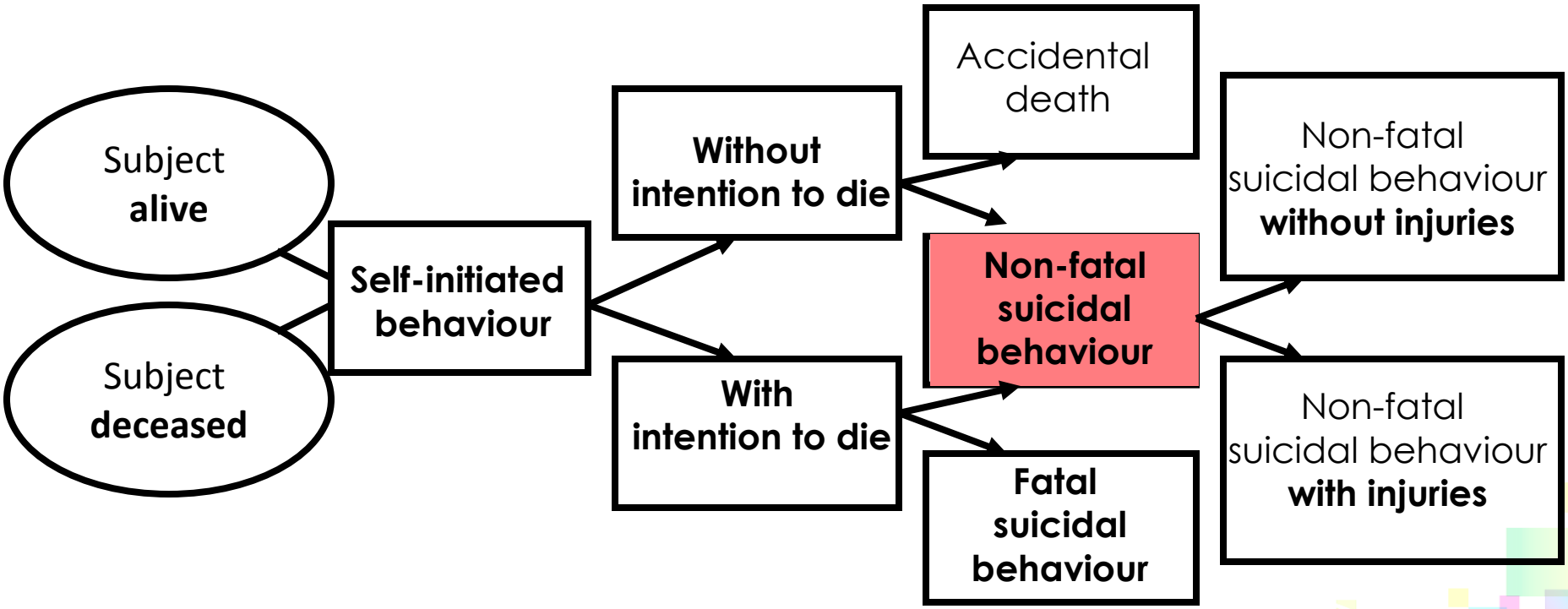
Connotations of Terms

Attempted/committed (completed) suicide:
value judgement

Self-harm:
implication of the absence of intent to die

Self-poisoning/self-cutting:
often habitual, self-mutilating behaviours

Outcomes of the WHO/EURO Multicentre Study on Suicidal Behaviour: Fatal and Non-Fatal Suicidal Flow Chart



(De Leo et al., 2004, 2006)

Outcomes of the WHO/EURO Multicentre Study on Suicidal Behaviour: Studying Suicide Intent and Severity

One of the main outcomes of the study was a strong push toward focusing on the person (the actor) and a stimulation at identifying suicide intention at the primary health care level, including emergency wards.

(De Leo et al., 2004, 2006; Schmidtke et al, 2004)

PARASUICIDE

"An act with a non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes which the subject desired, via the actual or expected physical consequences" (WHO/EURO, 1986)

Definitions in Suicidology

Parasuicide vs ***Attempted Suicide***

- Parasuicide as a sub-categoryofattempted suicide (attemptswith low or no intentiontodie)
- Attempted suicide as a sub-categoryof parasuicide (attemptswith strong intention)
- Parasuicide and attempted suicide mutuallyexclusive
- Parasuicide and attempted suicide interchangeable

WHO Definition ofNon-Fatal Suicidal Behaviour

Non-fatal suicidal behaviour, with or without injuries, is a non-habitual act with a non-fatal outcome that the individual, expecting to, or taking the risk, to die or to inflict bodily harm, initiated and carried out with the purpose of bringing about wanted changes

(WHO/EURO Working Group, 2004)

Non-Suicidal Self-Injury (NSSI): Criteria

- **A.** In the last year, the individual has, on 5 or more days, engaged in intentional self-inflicted damage to the surface of his or her body, of a sort likely to induce bleeding or bruising or pain (e.g., cutting, burning, stabbing, hitting, excessive rubbing), for purposes not socially sanctioned (e.g., body piercing, tattooing, etc.), but performed with the expectation that the injury will lead to only minor or moderate physical harm. The absence of suicidal intent is either reported by the patient or can be inferred by frequent use of methods that the patient knows, by experience, not to have lethal potential. (When uncertain, code with NOS 2.) The behavior is not of a common and trivial nature, such as picking at a wound or nail biting.

Non-Suicidal Self-Injury (NSSI): Criteria

- **B.** The intentional injury is associated with at least 2 of the following:

  1. Negative feelings or thoughts, such as depression, anxiety, tension, anger, generalized distress, or self-criticism, occurring in the period immediately prior to the self-injurious act.

  2. Prior to engaging in the act, a period of preoccupation with the intended behavior that is difficult to resist.

  3. The urge to engage in self-injury occurs frequently, although it might not be acted upon.

  4. The activity is engaged in with a purpose; this might be relief from a negative feeling/cognitive state or interpersonal difficulty or induction of a positive feeling state. The patient anticipates these will occur either during or immediately following the self-injury.

Non-Suicidal Self-Injury (NSSI): Criteria

- **C.** The behavior and its consequences cause clinically significant distress or impairment in interpersonal, academic, or other important areas of functioning.

- **D.** The behavior does not occur exclusively during states of psychosis, delirium, or intoxication. In individuals with a developmental disorder, the behavior is not part of a pattern of repetitive stereotypes. The behavior cannot be accounted for by another mental or medical disorder (i.e., psychotic disorder, pervasive developmental disorder, mental retardation, Lesch-Nyhan Syndrome).

Non-Suicidal Self-Injury (NSSI): Criteria

- Potential NOS Categories if DSM-5 adopts subtyping NOS categories:

  Non-Suicidal Self-Injury Disorder, Not Otherwise Specified (NOS), Type 1, Sub-threshold: The patient meets all criteria for NSSI disorder, but has injured himself or herself fewer than 5 times in the past 12 months. This can include individuals who, despite a low frequency of behavior, frequently think about performing the act.

- **Non-Suicidal Self-Injury Disorder, Not Otherwise Specified (NOS), Type 2, Intent Uncertain:** The patient meets criteria for NSSI but insists that in addition to thoughts expressed in B4 also intended to commit suicide.

Rationale for the diagnosis of NSSI

A new disorder should be unrepresented or inappropriately represented in DSM-IV; have clinical value, improving accurate identification and/or treatment; and be prevalent, impairing, and distinctive.

A. Limited and Inappropriate Representation in DSM-IV.

The closest representation in DSM-IV of the disorder we propose is criterion 5 of borderline personality disorder (BPD) (301.83): "Recurrent suicidal behavior, gestures, or thoughts or self-mutilating behavior." [But] …research has shown that repeated self-injury co-occurs with a variety of diagnoses and that many individuals who engage in repeated self-injury do not meet criteria for BPD.

Rationale for the diagnosis of NSSI

B. Clinical Implications:

1. NSSI is commonly viewed as pathognomonic of BPD.
2. Broad similarities to suicide-attempt behavior […] promote the view that self-injury with a sharp object is a form of attempted suicide.

Either of these conclusions is likely to lead to overly restrictive, expensive, and burdensome management, such as emergency evaluation and inpatient hospitalization or prolonged, frequent engagement in complex psychotherapies.

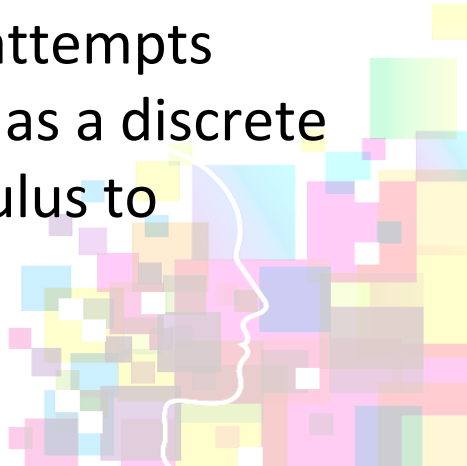
Rationale for the diagnosis of NSSI

D. Public Health Impact

The current representation of NSSI in DSM-IV has impacts on public health that go beyond the utilization of expensive treatment resources. It might also distort important surveillance and investigative procedures.

E. Impact on Research

The failure to distinguish between NSSI and suicide attempts impacts research activity. The establishment of NSSI as a discrete entity would clarify this distinction and act as a stimulus to innovative research.



DSM-V diagnosis of NSSI: **Advantages**

1. It follows WHO solicitations at studying suicide intention
2. It helps reducing the number of Borderline Personality Disorder diagnoses
3. It helps distinguishing self-harm from suicide attempt
4. It (maybe) helps reducing costs involved in care
5. It better defines suicide-related phenomena and their epidemiology/trends
6. It helps research

DSM-V diagnosis of NSSI: **Disadvantages**

1. It may end by lessening clinical attention on at-risk of suicide subjects
2. It will give a psychiatric diagnosis to millions of young people
3. It will create new occasions of stigma for those million people
4. ‘Label avoidance’ will keep faraway people from treatment seeking
5. Strong medicalization of suicidal behaviour appears to be in counter-tendency…

Quality of coding

- The accuracy of suicide statistics directly influences policy-making in mental and public health, planning and funding of preventative strategies, and research reports.
- Community awareness and support services depend on reliable reporting.
- Delineating the extent and costs of suicide is important for combating stigma and addressing the needs of those bereaved.

Data quality

Especially from 2002 to 2008, a substantial decline in data quality has been noted in Australia (De Leo, 2010; De Leo *et al,* 2010; Doessel*et al,* 2010) and in the US (Rockett*et al,* 2010).

Ubiquitous causes of under-reporting

- Unreported Death (Deliberately)
- Remoteness of Reportable Death
- Missing Person
- Life-Sustaining Medication Not Assumed
- Self-Starvation
- Euthanasia / Assisted Suicide
- Particular Suicide Methods (e.g. MV Accidents, Opiate Overdose)
- Dubious Circumstances of the Act (e.g. Falls, Drowning)
- Social Conditions (Insurance Policy)
- Social Position of Deceased
- Political Pressures
- Changes in Coding (e.g. from ICD-9 to ICD-10)
- Lack of Standardised Certification Procedures

Quality of coding

As a general rule, the quality of mortality data for a given country is inversely related to the proportion of causes of death recorded as ‘unknown’ (ICD codes: R95-R99). *Id est,* the higher the number of unknown deaths, the lower the quality of data in that country.

Quality of coding

Also the number of partially specified causes of death remarkably affects data quality. In a clear example provided by Bhalla*et al* (2010), the death of a car occupant killed in a road accident may be coded using any of the following categories, with decreasing specificity towards the end of the list:

- Unspecified road injury not including a pedestrian or bicyclist (V87-V88)
- Unspecified unintentional road injury (V89, Y85.0)
- Unspecified unintentional transport injury (V99, Y85.9)
- Unspecified unintentional injury (X59)
- Unspecified injury mechanism (Y89.9)
- Unknown cause of death (R95-R99).

Towards the ICD-11

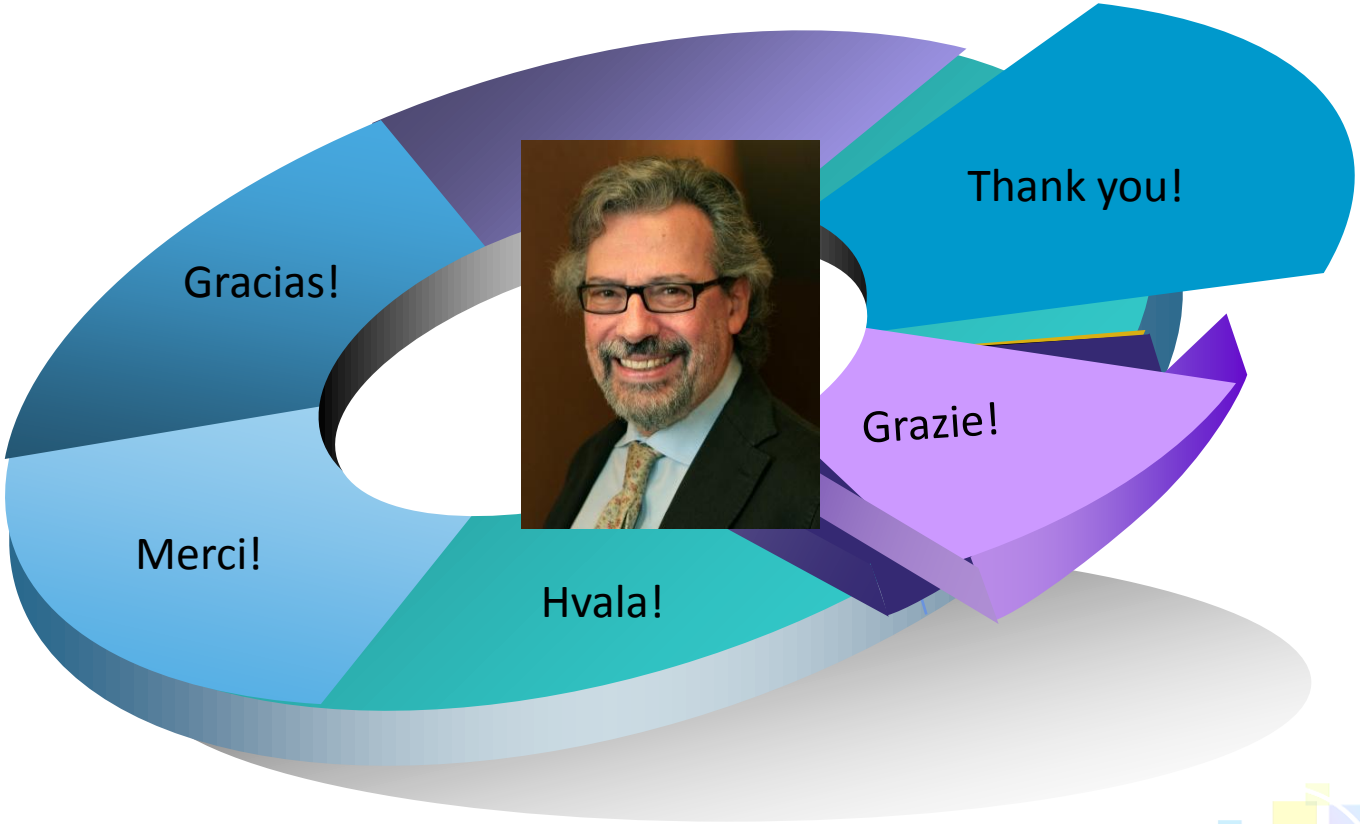
From
Intent-Mechanism-Method
to
Method-Mechanism-Intent?????

Massive reductions in suicide figures to be expected?

Towards the ICD-11

In the document, *"Restructuring the External Causes of Injury Chapter for ICD-11: Recommendation Paper"* by McKenzie, Fingerhut and Harrison (2010) presented in Geneva in February this year, 'Intentional Self-Harm' has been split in two values to capture 'Intentional Self-Harm (Suicide Not Intended)' and 'Intentional Self-Harm (Suicide Intended)'.

'Other Specified Intent' will be introduced to capture intents that are not able to be classified under the above (eg, euthanasia). 'Intent Pending Investigation' will also be introduced.



www.griffith.edu.au/health/australian-institute-suicide-research-prevention/research