Sussex Partnership
NHS Foundation Trust

Psycho-social contributing factors and suicidal behaviour of patients who committed suicide between March 2016 and March 2017

Adult mental health services

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Contents

Executive Summary

Patients who are treated by mental health services are at a higher risk of suicide, however the majority of people who succeed in killing themselves are not under the care of mental health services and this is not always reflected in the data provided by national statistics/agencies.
National and local statistics generally provide data and epidemiological facts about **all** suicides, and there is less data available about the social background or suicidal behaviour of patients within mental health services who complete suicide.

We set off this audit to gather specific data that would provide information about the **psycho-social contributing factors (**social background**)** and **suicidal behaviour** in the period preceding suicide and at the time of death, of patients who were treated by -or had recently been treated within- mental health services.

We were kindly provided the CIS/NHS numbers of 116 sudden deaths across the Trust between March 2016 and March 2017. Of those, 95 were "**suicides"**.

Psycho-social contributing factors:

- Most common psycho-social factors: we used a list of the most common contributing psycho-social factors in the period leading up to- and at the time of suicide. It was the same list we used to for the admission audit. This list covered the psycho-social factors we found in the notes; the original list was comprehensive and could be used without further adjustments for this audit.
- The only adjustment to the list was that alcohol and substance abuse were specified separately because they were so prevalent.

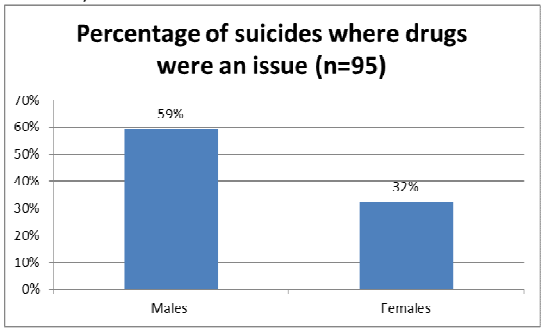
Suicidal behaviour: we used a tool** see appendix developed in the Netherlands to differentiate suicidal behaviour and used the tool to differentiate the suicidal behaviour of patients who completed suicide within the above named period.

Results & Conclusions

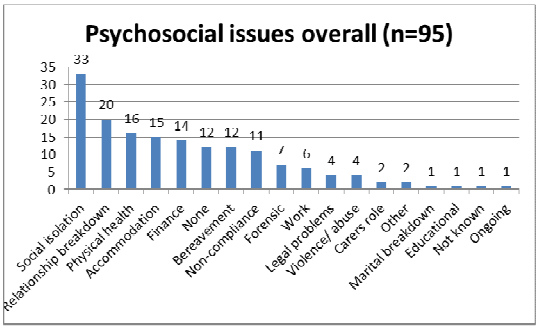
Main findings/results of the audit:

Clinical findings:

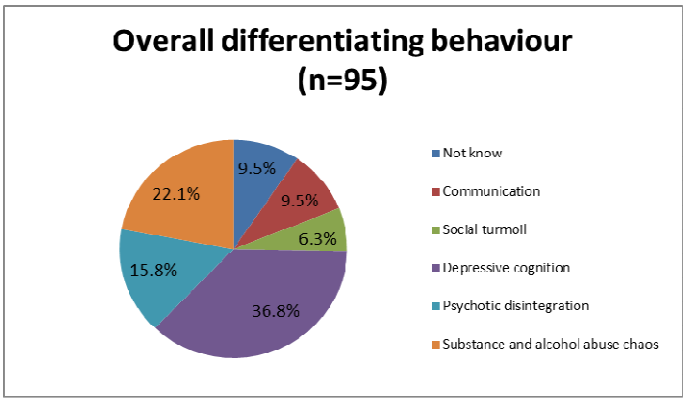
1) alcohol and substance abuse played a large part in suicides: for males this was in 60% of the cases, for females this was 32%



2) social isolation (loneliness, isolated and/or disengaged) was a major contributing factor in approximately 33% of the cases. (compared to admission: in 3% of admissions loneliness was a contributing factor)



3) the age-group in which the most suicides occurred was between 30-39 years (21 suicides in this age group); the age at which most people killed themselves was 45(6) closely followed by 37 and 52 (both 5).
4) most common form of suicidal behaviour was 'depressive cognition'



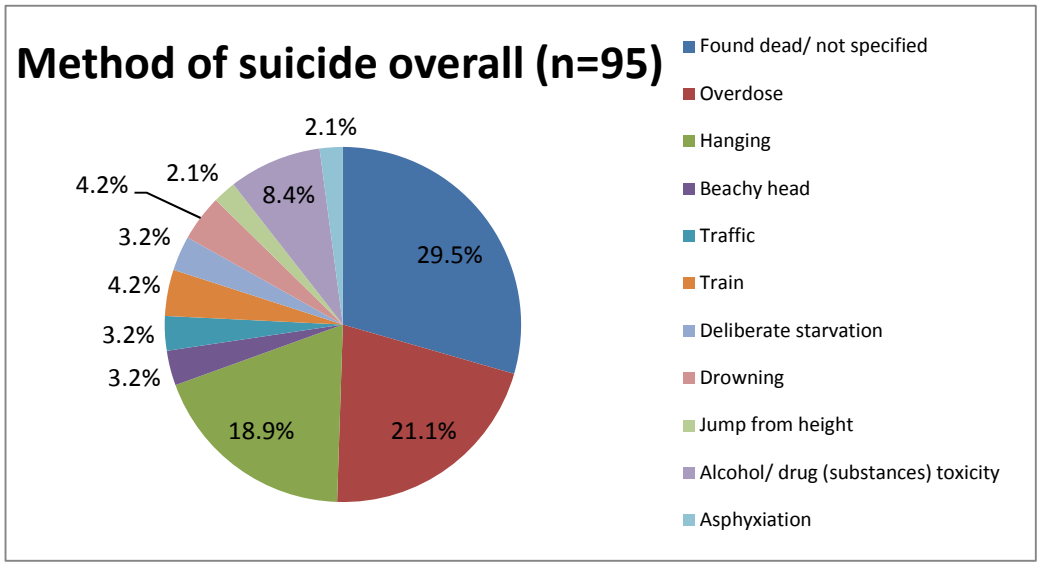
Where substances became a determining factor, patients did not fall comfortably anymore in either one of the four categories because every aspect of their life was affected: patients were socially entrapped, depressed, psychotic or used their substance abuse as a way of communicating their distress.

To catch this group we created a separate category for patients:

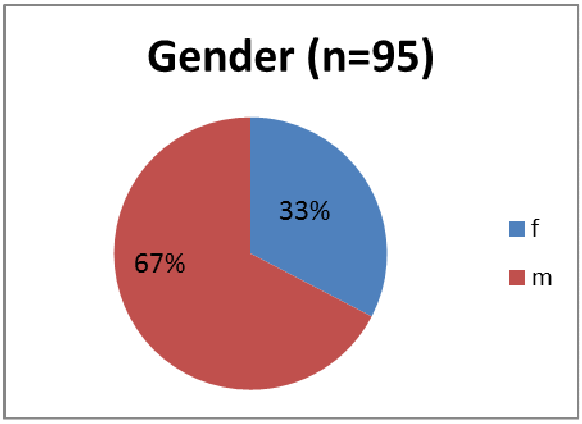
- who fell in 2 or more of the behaviour profiles
- who were abusing substances excessively and chaotically
- for whom it was noted that they died of an overdose of substances or alcohol
- had physical complications due to substance and alcohol abuse

If patients were compliant with 2 or more of the above, they were put in the separate category of "**substance and alcohol abuse chaos**".

5) Most common method was overdose however these numbers may be skewed because for 40% of the men the method of suicide could not be found back in the notes



6) 67% of completed suicides were men, 33% were women, which deviates from national statistics, where 75% of suicides are men and 25% are women.



7) Putting all the data and findings together, the most common profile of a patients completing suicide was that of a man
   a. socially isolated
   b. in his 30-ies
   c. single,
   d. living alone
   e. having alcohol and substance abuse issues
   f. having physical health problems
   g. suffering with a relationship breakdown

   who killed himself
   i. because of excessive substance abuse
   ii. out of desperation
   iii. because there was no one and nowhere left to go

Administrative findings:

1) the information in the notes was in most cases sufficient to be able to distract the information we needed, however the quality of the notes was variable
2) especially for male patients the circumstances around suicide were not well documented, the extent of which became clear when we looked at the cause of death which was not documented in 40% of the males.
3) there was limited documentation in care-notes of aftermath of suicides for most patients

Conclusions about psycho-social contributing factors and differentiation of suicidal behaviour:

Psycho-social contributing factors:

- The **major contributing factor to completed suicide is alcohol and substance abuse** which was specifically an issue for men (60%). For almost 27% of the men alcohol and substance abuse had completely unhinged their lives to an extent that alcohol and/or substances was a determining factor rather than a contributing factor to their suicide, whilst for women this was resp 32% and 13%, which is almost half of the problem compared to men but proportionally the same (half of the patients for whom alcohol or substance abuse played a part in their suicide, were suffering with severe and complex addiction problems that had completely destabilised their life, regardless whether they were male or female).
- The **second largest contributing factor is loneliness/social isolation**, playing a part in almost one third of the suicides, with men more often being lonely or isolated than women.
- Other contributing factors differed between men and women

Behaviour profile: the suicidal behaviour most often found was behaviour characterised by ‘depressive cognition’.
Behaviour differentiated as ‘social turmoil/entrapment’ or ‘ineffective communication’ was less common and ‘psychotic disintegration’ was around 16%. When this is compared with preliminary findings of the admission audit, where we found that more than half of the patients behaviour was differentiated as either social turmoil or ineffective communication, there is a striking difference between the behaviour profile of patients being admitted and patients completing suicide. Depressive cognition played a minor part in admissions whilst it had a major role in suicides.
Alcohol and substance abuse were equally prevalent for admissions and suicides.
However: for suicides substance abuse was a determining factor in their suicide rather than a contributing factor for almost half of patients who used substances and we did not find this for the admissions.

Administrative conclusions:

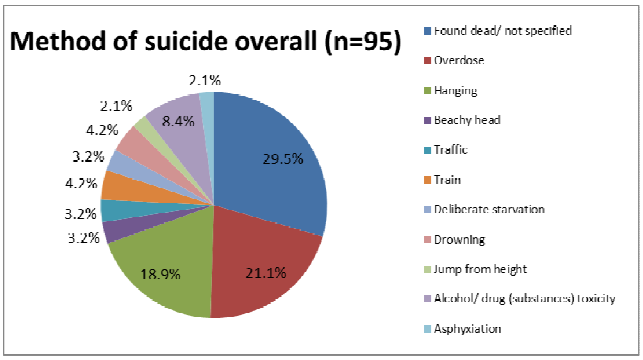
Quality of records:

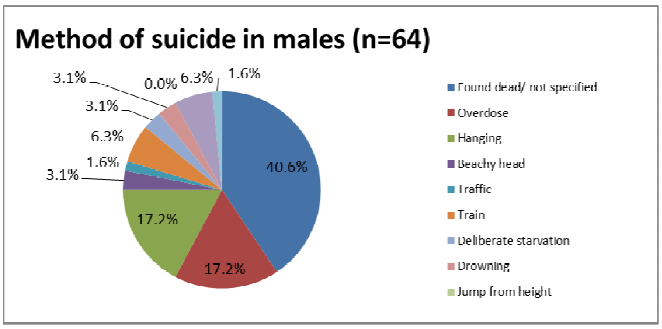
- For 40% 0f the male patients the method of suicide could not be found in the notes. For females this was 6.5%, however for the total of patients for 29.5% the method of suicide was not known, which is almost 1:3.
- Accommodation circumstances/iving arrangement should have been available in carenotes under the tab ‘demographics’ however this was not always completed or correct and had to be extracted from the notes.
- When information was lacking it was usually about the suicide, and/or what happened after the suicide.
- The level of risk determined the details of communication

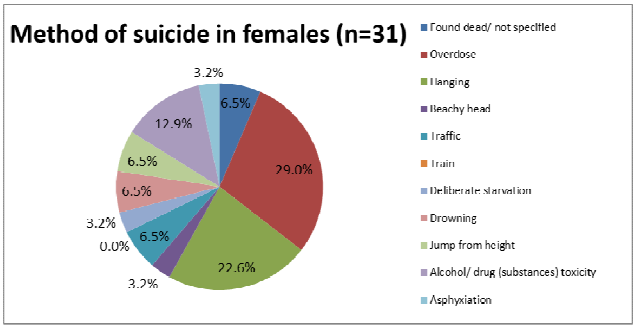
- patients who had been considered ‘high-risk’, were suffering with personality disorder, and were frequently seen by professionals generally had extensive notes, including risk assessments and information about follow up after the suicide.
- Notes of patients who were aggressive, not engaging or struggling with addiction were often limited, inconsistent and there was very little information about the suicide or follow up after the suicide.

- Very view notes were updated after the patient had died, however some actions like duty of candour or calls to families were more regualrly recorded. Information about suicide method, outcome of coroners or the SI notification were not added to the notes retrospectively in the majority of cases. The SI report was not added even though the SI report would give information about any issue with service provision or quality of notes.

Method of suicide as recorded in the notes: inconsistency in quality of recordings in the notes became evident when we looked at the method of suicide:







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Action plan

Summary of action plan will be under heading 4.4**:**

1) To highlight patients who present as suicidal and are isolated/lonely, who have recently not attended appointments and whose behaviour can be differentiated as ‘depressive cognition’.
2) For patients who present as a suicide risk to specifically add in the notes:
   social situation: is patient isolated or lonely?
   does patient have access to support?
   current alcohol and substance abuse
   has information about substance abuse services been provided?
3) To audit the quality of the notes, specifically
   a. Information under ‘demographics’
   b. Availability of information in the notes *after* suicide, specifically
      i. Coroner outcome/notes from coroners court about cause of death etc
      ii. Report for coroners’ court if case taken to coroners’
      iii. Outcome of coroners’ court
      iv. SI notification
      v. SI report

vi. Duty of candour actions (letter, phone-call)

4) For every patient who has completed suicide: to clearly document in the notes the date death and method of suicide, or to add the statement from the coroners' office
5) Re-audit suicides between March 2017-March 2018 and compare results of psycho-social risk factors and differentiated suicidal behaviour.
6) Trial in East Sussex: adding information as in point 1 and 2 to the notes of patients who present as suicidal

Section 1

1.1. Background Information

The drivers for the audit were

- to create a *'personalised patient profile'* of patients who completed suicide by
  - differentiating the suicidal behaviour with a tool currently in development
  - identifying the most common psycho-social factors found in the notes of patients who complete suicide
  - scrutinize individual patient notes to *extract person specific information* rather than using epidemiological data
- to improve quality of data in care-notes of patients who complete suicide with consequent improvement of SI investigations and coroners reports: when the right information is available the writing of reports will be easier and less time consuming.
- to collect information that will enable to compare the 'patient profile' of patients with completed suicide with the profile of patients who were admitted because of suicidality (at a later date)

1.2. Aims & Objectives

By completing the project we wanted to see if we could identify:

- *Specific behaviour* leading to suicide
- *Psycho-social contributing factors* playing a role in suicide
- Specific information that would need to be added to the notes to help with investigating suicides
- Specific information that would need to be added to the notes to enable profiling of patients who committed suicide

1.3. Standards

- Record keeping:
  - At least 95% of the notes would need to have information that would allow verifying psycho-social contributing factors and differentiation of the suicidal behaviour.
    - Between 85-95% is acceptable,
    - <80% would be unacceptable
  - **At least 90% of notes have a brief summary of the date of death and the method used**
    - Between 80-90% acceptable
    - Less than 80% not acceptable
- Differentiating suicidal behaviour:
  - >95% behaviour needs to be differentiated (including patients that are difficult to categorize)
  - between 90-95 is acceptable;
  - <85% is unacceptable
- Psycho-social factors:
  - >90% of notes should have social factors mentioned
  - <85% is not acceptable

Section 2

2.1. Sample

- A list of unexpected/sudden deaths between March 2016 and March 2017 was provided by the SI department.
- All patients who had completed suicide and of whom it could be confirmed from the notes that they died of suicide were included in the audit.
- The notes of the patients who died because of suicide were scrutinized and the information needed to differentiate the suicidal behaviour and the psycho-social contributing factors at the time of suicide were extracted from the notes.
- Patients who died suddenly because of poor physical health or an accident that was not a suicide, or any other cause of death that was not directly the result of intent to shorten or end their life were excluded.
- A couple of patients who deliberately starved themselves with intent to die (not as part of an eating disorder), knowing they would die because of the starvation were included as 'suicide', and method of suicide noted as 'starvation'.

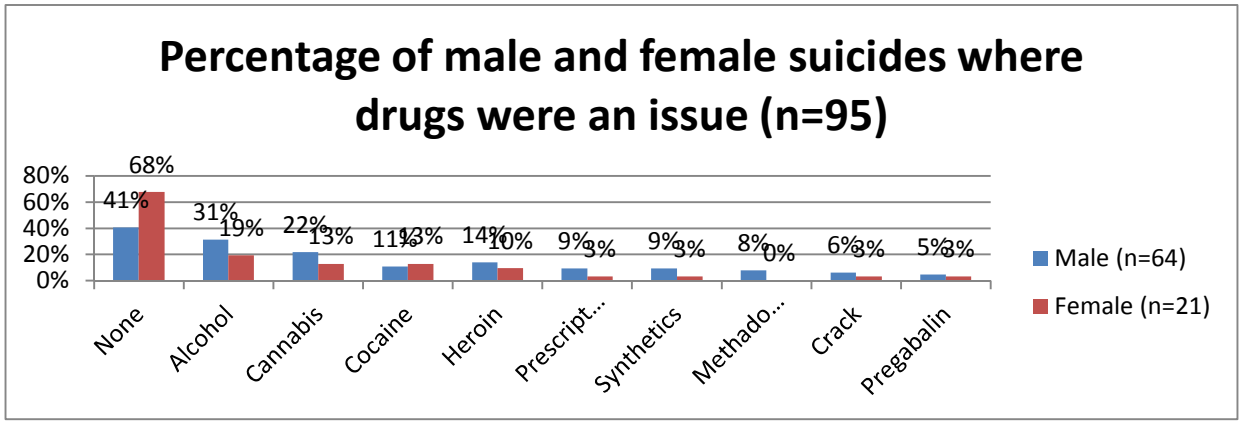
2.2. Data Collection

- See above: source of data was care-notes
- Patients were identified by their NHS number/CIS number as provided by the SI department
- Required data taken from notes was put in electronic tool (Excell);
- the data we looked at and distracted from the notes:
    - CIS number
    - age of death
    - date of death
    - marital status
    - accommodation (living with)
    - admission history
    - discharge history
    - previous suicide attempts
    - differentiated suicidal behaviour
    - method used
    - psycho-social factors
    - alcohol or substance abuse specified
    - diagnosis
    - which team
    - first involvement with services (as recorded in care-notes)

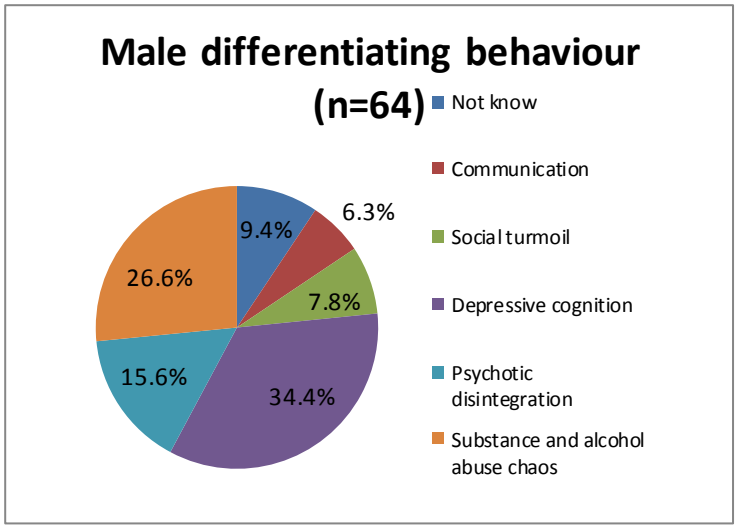
Information has been anonymized so patients cannot be identified in the audit report or tables/pie-charts.

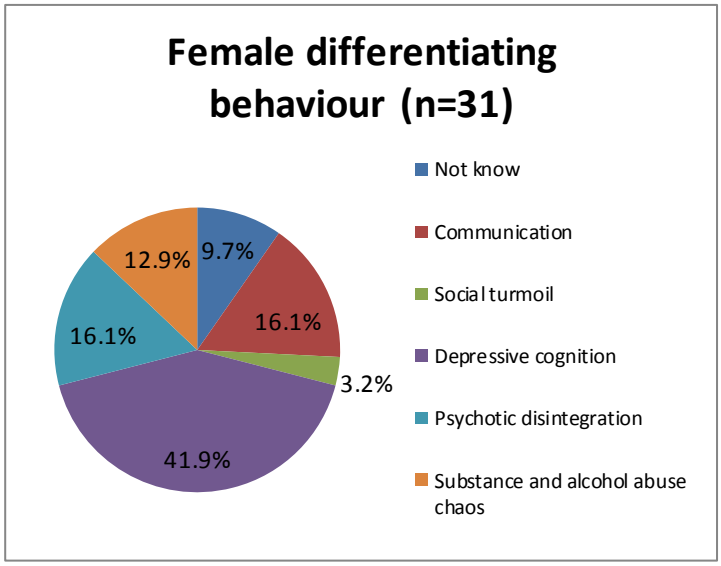
Section 3
3.1. Results

1) **Alcohol and substance abuse** contributed to a large number of suicides, more so for men (almost 60%) than for women (32%)



2) When substance and alcohol abuse was extensive it was not possible to differentiate the suicidal behaviour and a **separate category of 'alcohol and drug chaos'** needed to be introduced to catch this, as explained in executive summary



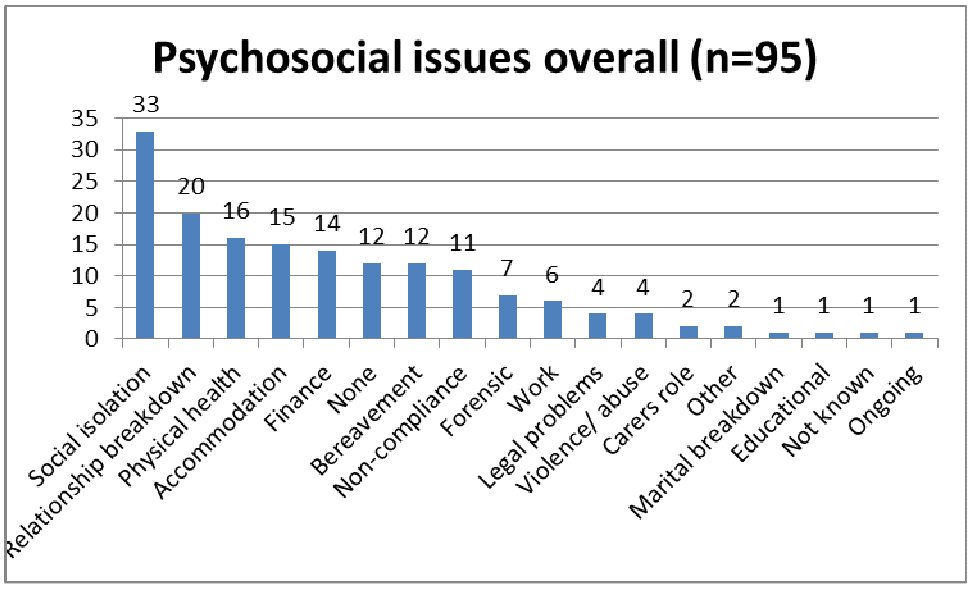


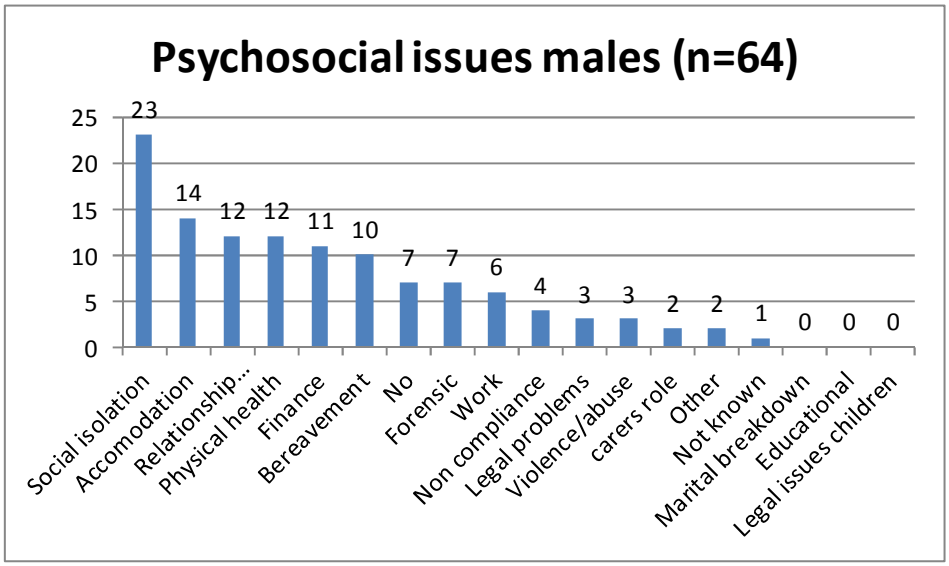
3) For a significant number of patients who were using substances, **alcohol and substance abuse were a determining factor** rather than a contributing factor to the suicide: females 12.9% males 26.6 %: see left:

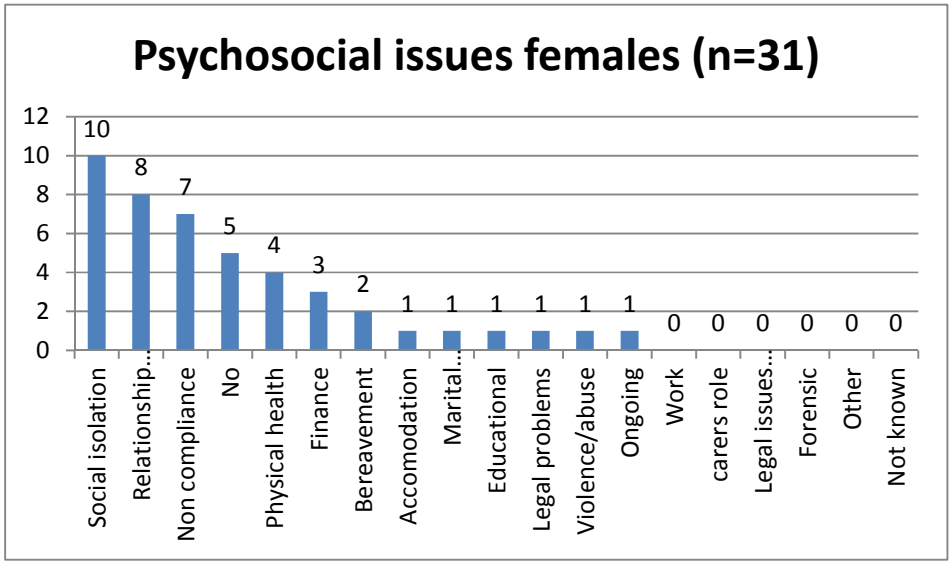
4) **Behaviour differentiation:** the most frequent found behaviour motivating the suicide was depression cognition which was more frequent in females than

in males. resp: 41.9% & 34.4%: see left

5) **Loneliness, social isolation and disengagement** seems to be a significant contributing factor to suicide in around 1/3rd of the cases, men (35%) women (32%).







6) **Significant differences between men and women** with regards to psycho-social contributing factors:

- **accommodation** issues were more often a problem for men (22%) than for women (3%);
- issues with **non-compliance** were greater for women (23%) than for men (4.7%)
- **physical health** problems were more of an issues for men (18.75%) than for women (6.25%)
- **financial** issues were more of a problem for men (17%) than for women (9%)
- **bereavement** was more of a problem for men (15%) than for women (6.45%)
- **forensic** and legal problems were more of an issue for men (resp.11% and 4%) than women (resp 0% and 3%)
- there were more women who did NOT have psycho-social contributing factors (16%) than men (10%)

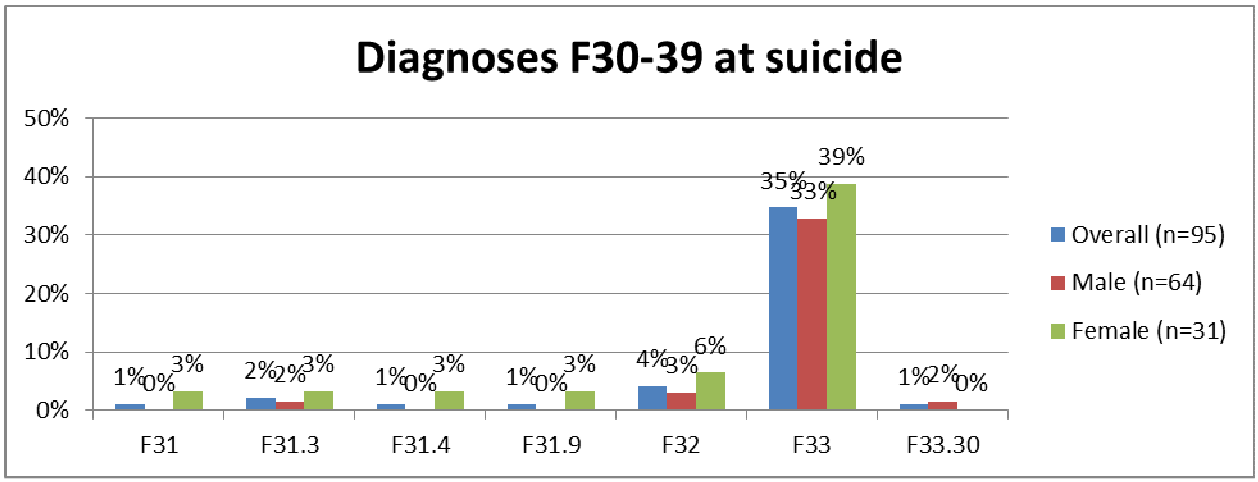
There are a number of factors which are not much different for men and women:

- loneliness (see above)
- relationship issues: approximately the same for men (22%) and women (26%)

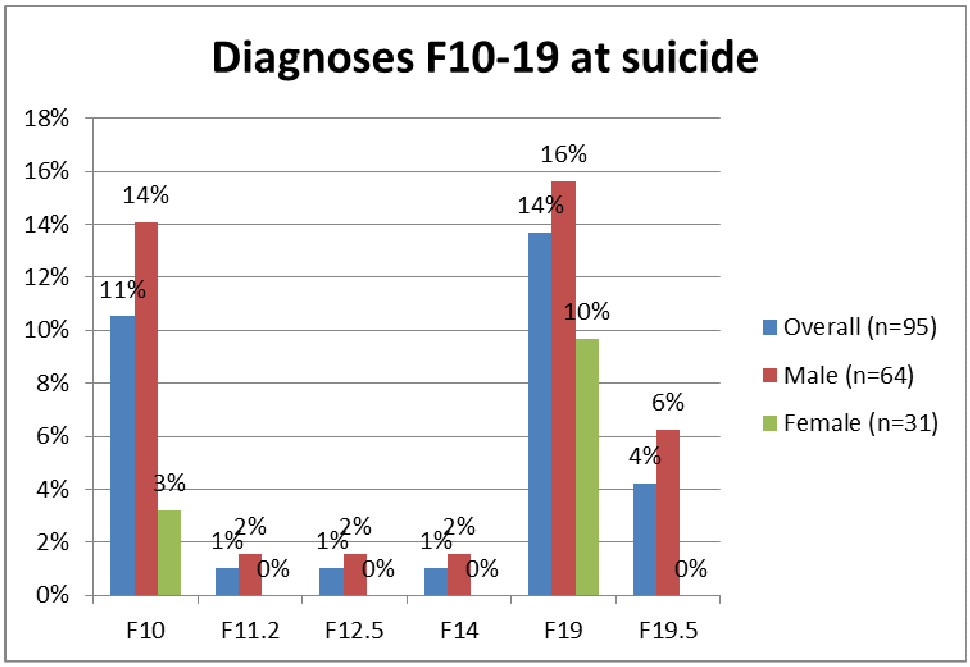
All together there seem to be more differences than similarities between men and women when contributing psycho-social factors are taken into consideration.
Non-compliance issues are very interesting, with almost one-quarter of women who complete suicide being non-compliant with treatment (in most cases medication). Perhaps the side effects of weight-gain puts women off to take antidepressants, putting them in a vulnerable position and at increased risk for suicide.

7) There were some expected and some unexpected findings with regards to **diagnosis**:

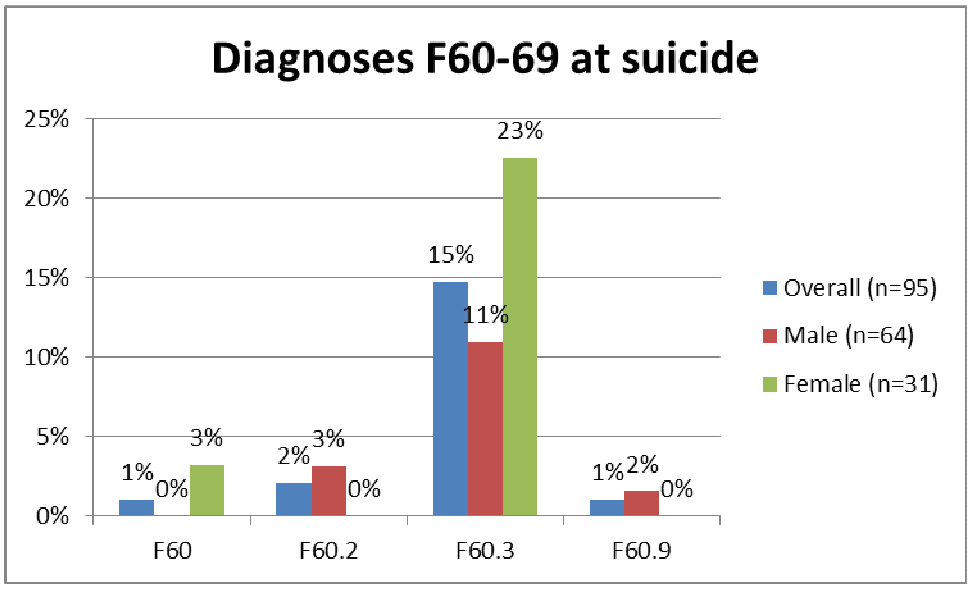
- The ***most commonly found diagnosis was depressive disorder, of longer duration*** (F33): general 33%, of which females 39% and males 35%. The diagnosis of bipolar-affective disorder was relatively infrequent, whilst in international literature suicide is considered a very high risk for patients with bipolar affective disorder.



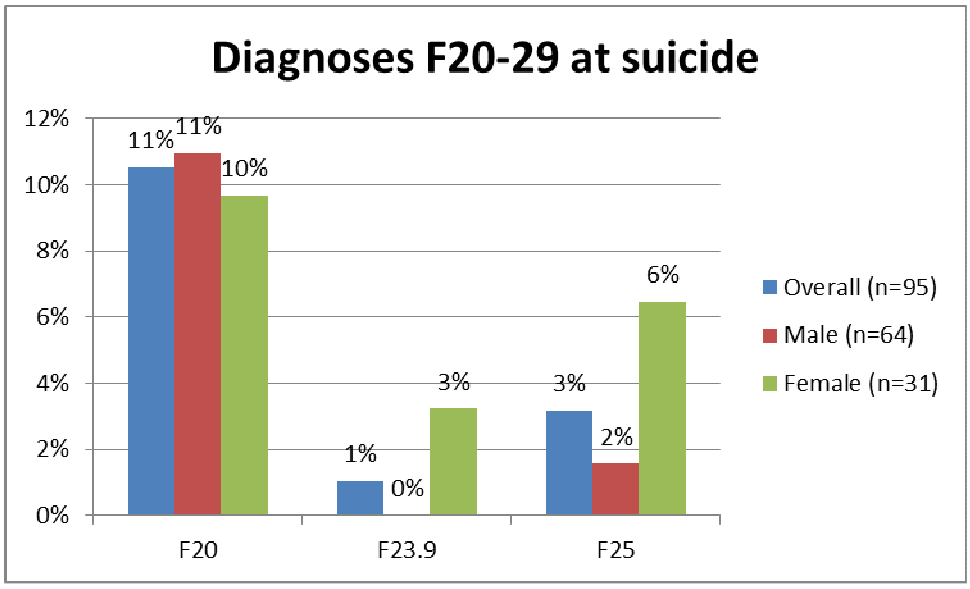
- The ***2nd most commonly found diagnosis was alcohol and substances abuse***, especially poly-substance abuse: general 14%, of which 16% of males and 10% of females; alcohol abuse: 11% of which 14% males and 10% of females; substance abuse seems to be more of a problem for the males who complete suicide, which was expected however it was not expected that poly-substance abuse would be more of a problem than alcohol.



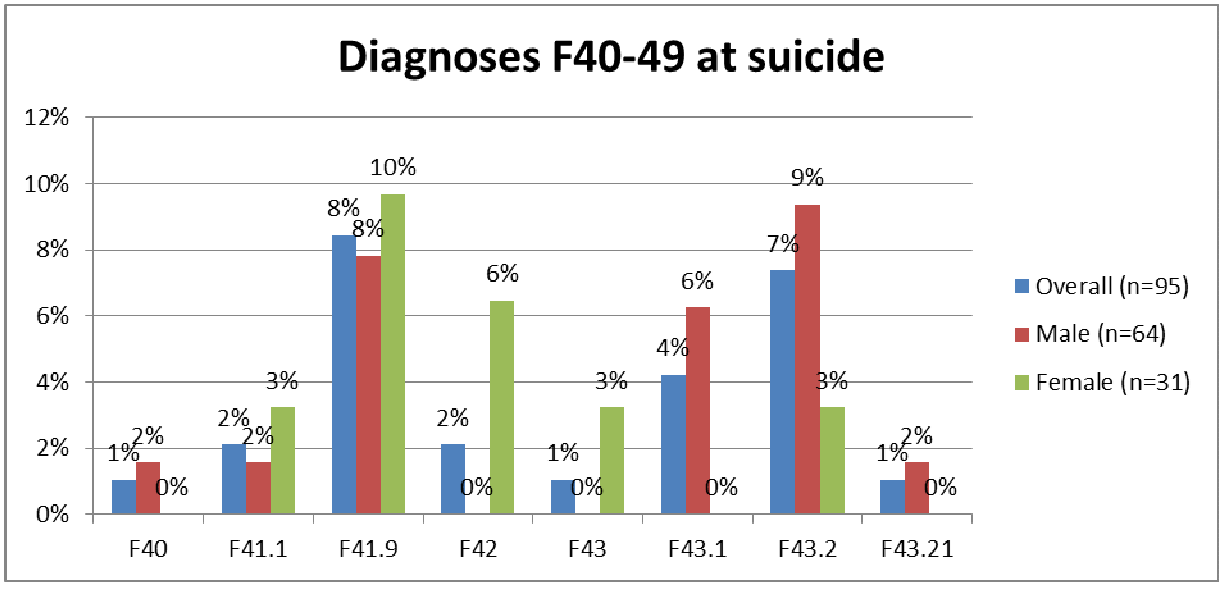
- The ***3rd most commonly found diagnosis was personality disorder***, with some surprising findings:
    - 15% of patients were diagnosed with EUPD, with a large discrepancy between females (23%) and males (11%). The discrepancy between females and males was expected.
    - Not expected is that the total % of patients diagnosed with EUPD is higher than of psychotic disorders/schizophrenia whilst in the literature usually the diagnosis of schizophrenia is more common than personality disorder for patients who complete suicide.
    - The diagnosis of anti-social personality disorder was exclusive to males (3%)



- Psychotic illnesses: paranoid schizophrenia was the 4th most commonly found diagnosis 11% and almost similar for females (10%) and males (11%); other psychosis diagnoses were limited. Except schizo-affective disorder (F25), which was more common for females (6%) than males (2%)



- There is a relatively large contribution of 'neurotic and stress-related disorders, especially anxiety disorder not specified (41.9) F43.1 (Post Traumatic Stress Disorder) and F43.2 (adjustment disorder).
    - Anxiety disorders were almost as frequent for males (8%) as for females (10%), where you would expect it to be much more frequent for females
    - With **PTSD exclusive to males** (6%) and adjustment (7%) disorder more prevalent males (9%) than for females (3%): one would expect PTSD to be a frequent diagnosis in females especially as a concomitant diagnosis of females with EUPD.



- Summarizing: information about diagnoses of patients who complete suicide varies and depends on the country where the research was done and how long ago the research was done. What was unusual in this audit was the relatively large contribution of neurotic and stress related illnesses, especially PTSD, which was exclusively diagnosed with males, and adjustment disorders predominantly diagnosed with males; also poly-substance abuse being a more frequent diagnosis than alcohol abuse. There was a relative small number of patients diagnosed with bipolar affective

disorder, whilst in the literature it is often mentioned as the diagnosis that carries the highest risk of suicide.

Finding with regards to proposed administrative standards; compliance with preferred/proposed standards:

- Demographics:
  - Accommodation: known for all female patients; not known for 6.3% of the men; overall 4.2%
  - Marital status: known for all female patients, not known for 2.1% of the men; overall 2.1%

  This would comply with the proposed standard, however often the information had to be extracted from the notes and was not available or correct under the 'patient demographics' tab in care-notes.
- Differentiating behaviour
  - No known for females: 9,7%
  - Not known for males 9.4%

  The findings comply with the proposed standards. It was expected that-as with all other parameters for males- the percentage of males whose behaviour could not be differentiated would be higher than for females, however with the abundant substance abuse amongst males, differentiating was more straight forward.
- Method of suicide: number of patients whose method of suicide was not known or noted as 'found dead':
  - Males 40.6% not known
  - Females 6.5% not known
  - Overall 29.5% not known

  This has been discussed before. For females the standard would be acceptable however for males the standards are not even closely met and the lack of documentation is unacceptable. for 29.5% of cases not being clear what the method of suicide was, is equally unacceptable.

Section 4

4.1. Conclusion

This audit has generated far more information than expected and not all findings can be used for this audit. When it comes to action plans, we want to focus on the documentation and quality of the notes, because good quality notes are essential to verify the findings and conclusions, and will enable improved quality of auditing for the re-audit.
The clinical findings, like gender differences, the contribution of substance abuse, outcomes that differ from national numbers, contributing social factors especially loneliness and methods of suicide should be investigated separately.
We have made a distinction between 'clinical conclusions' and 'documentation conclusions', with the action plan focussing primarily on the documentation conclusions:

Clinical conclusions:

- Loneliness seems to be a major psycho-social contributing factor to suicide, both for females and males: loneliness as a contributing factor to suicide in mental health patients has been documented in research/literature about suicide, however the specific impact of loneliness as a contributing factor has not consistently been investigated, and it is worth asking for loneliness when dealing with patients who present as suicidal and auditing this for patients who complete suicide and patients who present with suicidal ideation but do not proceed to suicide.
- Alcohol and substance abuse is a major contributing factor especially for males and in about 20% of the suicides it is a determining factor. Similar findings are available in the literature and research about suicide.
- A much unexpected finding is that the diagnosis of PTSD is exclusive for male patients who complete suicide and no females were diagnosed with PTSD.
- From the above you might conclude that males are more susceptible to psychological trauma and find it more difficult to adjust to a change their social situation, resorting to substances and alcohol to manage the stress.

- Men who complete suicide also seem to be more socially vulnerable then women, finding it more difficult to keep a roof above their head, manage their finances, maintain a relationship or a support network, and are harder hit by bereavement.
- From a suicide prevention point of view the conclusion is that more emphasis and prevention-plans need to be aimed at prevention of loneliness and addiction, both of which are not solely the realm of psychiatry and we need to liaise with tertiary services, primary care, addiction services and social services to comprehensively develop an effective prevention plan. We actively need to involve those services in the 'towards zero suicide' project for it to be effective.
- Patients who present with suicidality because of substance abuse issues need to be followed up carefully because the risk of suicide increases when the substance abuse problems get out of control, and half of the patients who completed suicide and presented with substance abuse problems were caught up in complex addiction problems, with addiction becoming a determining factor for their suicide.

Conclusions about administration:

- With regards to the notes and documentation: some of the standard documentation in care-notes like demographics was incomplete or incorrect. Docmentation *after* a patient had completed suicide was inconsistent and usually restricted to patients who had presented frequently, were considered high risk and were complex.
- To verify the findings especially findings around the contribution of psycho-social factors including loneliness and substance abuse to suicides, we would need to document those more carefully and specifically ask for them when patients present as suicidal.
- Not only for future reference, but also out of respect for patients and their families, we need to more carefully document the afermath of a suicide. This would include the coroners statement (if done), the SI notification and investigation, the outcome of the coroners' court and the date/cause and method of suicide.

4.2. Recommendations

1) Improve documentation especially documentation about the aftermath of the suicide for all patients who have completed suicide
2) Improve the quality of the standard documentation under 'demographics' in care-notes
3) When patients present as suicidal, specifically ask for :
    a. Substance abuse, with specified use
    b. Loneliness, isolation and risk of disengagement
4) Further audit into the differences between men and women with regards to suicide; when it comes to suicide men seem to be more vulnerable than women and we may underestimate the distress of men when they present as suicidal.
5) Improved availability and access to places/people who support patients who are isolated and feel suicidal, if possible in liaison with third sector (see patient quotes below), which would be in line with recommendations from the Royal College of Psychiatrists :

'*I would like to see more local or an NHS local self help support group. You need to feel you are not alone'*

'*Information on how common self-injury is would be helpful. I used to feel abnormal and weird as I thought I was the only person to do this. Information could have helped reduce the shame and isolation this caused me*.'

quotes from 'position statement on self-harm, suicide and risk' RCPsych 2010

6) Re-audit/follow-up audit to be conducted about
    a. Documentation
    b. Verification of the above found psycho-social risk factors especially
        i. Loneliness/isolation
        ii. Alcohol and substance abuse

4.3. Expected Improvements to Service-User Experience

- Outcome 1: improved quality of note-taking of patients presenting with suicidal ideation allowing better profiling of patients presenting with suicidal ideation and information about social situation and suicidal behaviour
- Outcome 2: improved documentation after suicide, to improve research/auditing suicides which will ultimately benefit all patients
- Outcome 3: a respectful and complete administrative closure for all patients who committed suicide and their families.
- Outcome 4: specific area's to focus on with regards to suicide prevention: loneliness and substance abuse that are integrated in the approach/care-plan of patients who present with suicidal ideation.

4.4. Action Planning

Table -

	Action	Lead Name	Deadline
1.	Pilot trust wide suicides between March 2017 and March 2018 and compare data with this audit	Dr Connie Meijer and dr Humaira Rafi	November 2018
2.	Arrange for summary (date of suicide, method of suicide, statement coroners' office) to be added to the notes of patients who complete suicide after July 2018 and audit between July 2018 and January 2019	Dr Meijer	March 2019
3.	Audit of notes of patients who completed suicide between March 2016 and March 2018 specifically for • Accuracy of demographic data in care-notes	Dr Meijer	May 2019

4.5. Contacts

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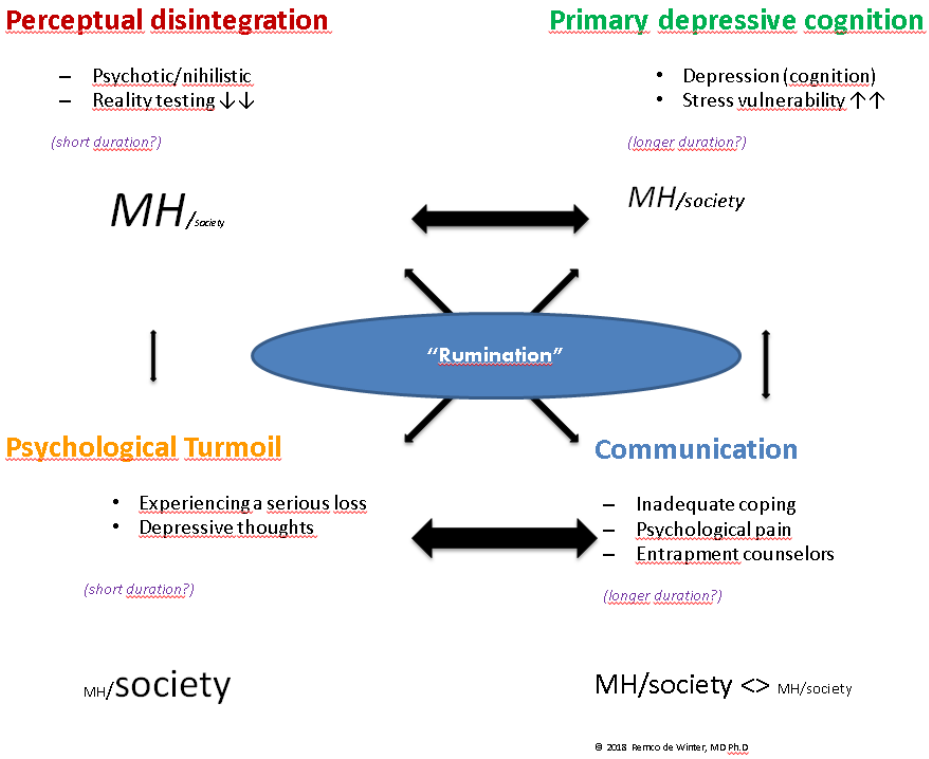
Appendix

1) Schedule of differentiating suicidal behaviour



2) Scoringslijst differentiatie van suïcidaal gedrag met de SUICIDI translation.docx: scoring list differentiation suicidal behaviour with translation in English

3) **Psycho-social factors**

The most commonly found psycho-social contributing factors were:

1) **work** related problems (eg unemployed, dismissed, suspended, bullying at work etc)
2) **financial** problems (including debts, rent-arrears, benefits stopped or reduced, alimony etc)
3) issues with **accommodation** (homeless, temporary accommodation, eviction or impending eviction, uninhabitable or inappropriate accommodation etc)
4) **breakdown relationships** (breakdown of relationships within family, friends, colleagues, neighbours etc)
5) **marital breakdown** and discord or divorce
6) **substance abuse** (substance abuse leading to deterioration of mental health or triggering relapse)
7) **alcohol** abuse (as above for alcohol)
8) **non-compliance** (not taking medication, not meeting appointments or disengaging from services)
9) problems with **education** (exam stress, poor results, specific learning requirements, inability to meet demands of university or other training)
10) **bereavement** (death of someone near and dear)
11) **social isolation and loneliness** (lack of friends, lack of activities outside the house, perceived loneliness, lack of support network)
12) **physical health** problems (any, but specifically alert about pain symptoms)
13) **carers' role** (caring for partner, parents, children or anyone close)
14) **legal problems** (convictions, needing to appear in court, release from prison, charges)
15) **legal problems around children** (children being taken away, being fostered or adopted; no access to children)
16) **violence and abuse** (both in relationship and towards others with whom not in a relationship)
17) **forensic problems** (known to forensic services)
18) **other** (for example on-going triggers for patients with personality disorders)

4) hyperlinks to articles:

* Link statistics suicide UK: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2016registrations
* .Link suicide methods: http://cebmh.warne.ox.ac.uk/csr/resmethods.html
* Link international data suicide methods: http://www.who.int/bulletin/volumes/86/9/07-043489/en/
* Link homelessness and deaths related to homelessness including suicide: https://www.crisis.org.uk/media/236799/crisis_homelessness_kills_es2012.pdf
* Link loneliness and suicide: https://www.medscape.com/viewarticle/886704
* Link loneliness and suicide: http://www.webofloneliness.com/
* Link alcohol and suicide: https://academic.oup.com/alcalc/article/41/5/473/109923
* Link alcohol and suicide: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2872355/
* Link to several findings on drug related deaths: http://findings.org.uk/PHP/dl.php?file=overdose_prevent.hot
* Link to 'health services and suicide prevention': https://doi.org/10.1080/09638230802370704
* Link epidemiological data: time between discharge from services and suicide : https://www.ncbi.nlm.nih.gov/pmc/articles/PMC27859/
* Link diagnosis and suicide: https://www.nap.edu/read/10398/chapter/5#73
* link to Prevention suicide guidelines including high risk groups : guideline under development https://www.nice.org.uk/guidance/gid-phg95/documents/final-scope