



Royal Veterinary College
University of London



A comparative study of the mental health and wellbeing of different professional student populations

Elisa Lewis

Supervisors:

Dr Jackie Cardwell, RVC

Professor Jonathan Smith, Birkbeck

Background

Poor mental health and an elevated suicide risk identified amongst medical occupational groups

Professionals widely studied, scant research with UK professional students and few comparative studies

The present research aims to estimate and compare the prevalence of mental ill-health of students training for the healthcare professions

Proposed explanations for heightened psychological distress

- Self-selection and recruitment of students susceptible to mental health problems
- Vulnerable personality traits
- Negative effects and stressors of training
- Mental health stigma
- Fears of impact upon career

Veterinary Student Mental Health: RVC Study

A cross-sectional study of mental health in veterinary undergraduate students

Cardwell, J.M., Lewis, E.G., Bailie, S.B., Holt, E.R., Allister, R., Mellanby, R. & Adams, V.J.

- Aimed to quantify: mental health and attitudes towards mental health and suicide
- Participants: All five years of the RVC Bachelor of Veterinary Medicine Course. Response rate: 48% (509/1086)

Key Findings:

- Wellbeing amongst veterinary students significantly poorer compared with the general population, $p < 0.001$ (NatCen, 2010)
- Significantly higher levels of mental distress amongst students than the UK general population, $p < 0.0001$ (NatCen, 2010)
- 54% has experienced a mental health problem
- 25% had engaged in suicide ideation

How do RVC Students Compare with Other Veterinary Medicine Students?

International studies also reveal high levels of distress:

- 37% of veterinary students felt “so depressed it was difficult to function” (Kogan et al. 2005)
- 32% experienced clinical levels of depressive symptoms (Hafen et al. 2006)
- 2/3 felt overwhelmed the heavy workload (Collins & Foote, 2005)
- 87% of Australian veterinary students “rarely or never sought professional counselling” (Williams et al. 2005)

Factors associated with distress and help seeking in veterinary students

Mental distress:

- Difficulty fitting in with peers
- Interpersonal problems
- Work overload
- Academic concerns

(Hafen et al. 2006, 2008; McLennan & Sutton, 2005)

Help seeking:

- Stigma: perceptions of “not handling things well” or “not strong”
(Kogan & McConnell, 2001)
- Competitive atmosphere and fear of admission error
(Collins & Foote, 2005)

Do veterinary students differ from other student groups?

We don't know. Very few direct comparisons with other professional groups.

Single population studies show heightened psychological morbidity among healthcare students.

Key Findings from the Literature

Medical Students:

- Prevalence of depression amongst US medical students 22%, amongst general public 8-15% (Goebert et al. 2009)
- Mental ill-health amongst students at Glasgow University Medical School more than doubled from 25% - 52% between first and third term (Moffat et al. 2004)
- 2/3 of medical students who screened for depression previously experienced depressive episodes (Zoccolillo et al. 1986)
- Suicide ideation over the past year 14%, age-matched US population prevalence 6.9% (Tyssen et al. 2001)

Key Findings from the Literature

Medical Students:

- <25% of depressed medical students sought help (Givens & Tjia, 2002)
- “Tell no one but encourage him/her to seek professional help” most common response by medical students to hypothetical illness in a colleague (Roberts et al. 2005)
- Stigma related to help-seeking in students at Manchester University Medical School:

“There is a lot of stigma, there is a lot of shame”

“...If you go to somebody in the medical school it'll reflect badly on you and stay with you for the rest of your time at medical school at least”

“I wouldn't want it on my CV”

(Chew-Graham et al. 2003)

- Medical students, who had previously sought counselling, less likely to be invited to interview for residencies (Oppenheimer & Miller, 1988)

Key Findings from the Literature

Dental students:

- Psychological distress rose from 36% in the first year to 44% in the fifth year (Gorter et al. 2008)
- Emotional exhaustion – 39%,
Depersonalisation – 20% (Gorter et al. 2008)
- Low levels of social support associated with depression (Laurence et al. 2009)

Key Findings from the Literature

Pharmacy students:

- High levels of stress negatively correlated with health-related quality of life and self-esteem (Marshall et al. 2008, Mimura et al. 2008)
- Mental wellbeing significantly poorer than age-adjusted US population norms (Hirsch et al. 2009)

Key Findings from the Literature

Multi-cohort studies

- Prevalence of psychological stress in fifth year: dental students 72% v medical students 32% (Newbury-Birch et al. 1998)
- High levels of perfectionism among medical, dental and pharmacy students. Pharmacy students highest on socially prescribed perfectionism (Henning et al. 1998)
- 50.1% of pharmacy students clinically distressed, higher prevalence than both dental and medical students (Henning et al. 1998)

Selecting the populations

Healthcare profession students subject to similar stressors

- Veterinary Medicine
- Medicine
- Dentistry
- Pharmacy

Suggested contributing factors to psychological distress:

- Competitive and high achieving environment
- Perfectionism
- Dissonance between expectation and reality
- Social and people skills
- Reluctance to seek help
- And Law students...

Key Findings from the Literature

Law students:

“There are literally hundreds of published anecdotal reports describing the law school experience” (Dammeyer & Nunez, 1999)

- Law students higher significantly higher rates of psychiatric distress than medical students and the general population (Shanfield & Benjamin, 1985)
- Before law school mental health similar to general population, significant increases in distress post entry (Shanfield & Benjamin, 1986)
- Increase in depression from 21% pre-law school to 50% at the end of the first year (Reifman et al. 2000)

Questionnaire Design

Extension of questionnaire used in research with RVC students

| Scale | Measuring |
|---|---|
| Warwick-Edinburgh Mental Well-Being Scale | Wellbeing |
| Well? What do you think? | Attitudes to mental health |
| The Suicide Opinion Questionnaire | Attitudes to suicide |
| General Health Questionnaire | Mental health |
| Beck Depression Inventory | Depression |
| NEO-PI | Personality |
| Frost Multidimensional Perfectionism Scale | Perfectionism |
| 2 questions from Adult Psychiatric Morbidity in England survey) | Suicide ideation and attempts |
| Bespoke question about specific past/current problems | Experience of specific mental health problems |

Populations and responses...so far

Veterinary students: 595

Medical students: 141

Pharmacy students: 148

Dentistry students: 98

Law students: 165

Preliminary Findings: Wellbeing

Feelings and thoughts over previous two weeks assessed using **Warwick Edinburgh Mental Wellbeing Scale**

0 = least positive; 70 = most positive

No significant difference between the populations

Preliminary Findings: Mental Ill-Health

Assessment of recent personal experience of mental health problems using the **General Health Questionnaire**

0 = least distressed; 36 = most distressed

The level of distress differed significantly between degree courses ($p = 0.001$).

School 5 experienced significantly higher levels of distress than both School 1 ($p < 0.001$) and School 3, ($p = 0.03$)**

**Student groups have been anonymised until data collection completion

Preliminary Findings: Depression

The **Beck Depression Inventory** was used to detect depression and assess its severity

0 = non-depressed; 63 = severely depressed

Level of depression differed significantly between degree courses ($p = 0.006$)

School 5 had higher scores on the BDI, denoting greater severity of depression, than School 1, $p = 0.003$

Preliminary Findings: Experience of Specific Issues

“Are you currently experiencing any of the problems listed below?”

| | School 1 | School 2 | School 3 | School 4 | School 5 |
|--|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|
| Anxiety disorder / panic attack | 17.4% (92/530) | 16.4% (19/116) | 10.5% (8/76) | 18.3% (20/109) | 17.6% (22/125) |
| Depression | 19.8% (105/530) | 19.8% (23/116) | 7.9% (6/76) | 17.4% (19/109) | 24.0% (30/125) |
| Eating disorder | 5.8% (31/530) | 4.3% (5/116) | 6.6% (5/76) | 9.2% (10/109) | 11.2% (14/125) |
| Low self-esteem | 36.4% (193/530) | 28.4% (33/116) | 28.9% (22/76) | 36.7% (40/109) | 39.2% (49/125) |
| Obsessive compulsive disorder (p < 0.05) | 7.9% (42/530) | 4.3% (5/116) | 5.3% (4/76) | 10.1% (11/109) | 15.20% (19/125) |
| Self-harm (p < 0.05) | 3.0% (16/530) | 6.0% (7/116) | 1.3% (1/76) | 0.9% (1/109) | 8.0% (10/125) |

Preliminary Findings: Suicide Ideation

“Have you ever thought about taking your life, even if you would not really do it?”

| | School 1 | School 2 | School 3 | School 4 | School 5 |
|---|---------------------------|--------------------------|-------------------------|--------------------------|--------------------------|
| Yes – most recently in the last 12 months | 20.2% (107/530) | 31.9% (37/116) | 11.8% (9/76) | 11.0% (12/109) | 26.4% (33/125) |
| Yes – most recently more than 12 months ago | 18.5% (98/530) | 17.2% (20/116) | 15.8% (12/76) | 22.0% (24/109) | 16.0% (20/125) |
| Overall: | 38.7% (205/530) | 49.1% (57/116) | 27.6% (21/76) | 33.0% (36/109) | 42.4% (53/125) |

Preliminary findings: Suicide Attempts

“Have you ever made an attempt to take your life, by taking an overdose of tablets or in some other way?”

| | School 1 | School 2 | School 3 | School 4 | School 5 |
|---|-------------------------|--------------------------|-----------------------|-------------------------|-------------------------|
| Yes – most recently in the last 12 months | 0.9% (5/530) | 2.6% (3/116) | 0% (0/76) | 1.8% (2/109) | 3.2% (4/125) |
| Yes – most recently more than 12 months ago | 6.2% (33/530) | 9.5% (11/116) | 5.3% (4/76) | 7.3% (8/109) | 4.8% (6/125) |
| Overall: | 7.2% (38/530) | 12.1% (14/116) | 5.3% (4/76) | 9.2% (10/109) | 8.0% (10/125) |

Preliminary findings: Attitudes to Mental Health Problems

“Anyone can suffer from mental health problems”

| Strongly Agree / Agree | | | | |
|---------------------------|---------------------------|-------------------------|---------------------------|---------------------------|
| School 1 | School 2 | School 3 | School 4 | School 5 |
| 95.2% (554/582) | 94.9% (130/137) | 92.5% (86/93) | 92.1% (128/139) | 91.1% (144/158) |

Scottish general population: 93% (Well? What do you think? 2008)

“If I were suffering from mental health problems, I wouldn't want people knowing about it”

| Strongly Agree / Agree | | | | |
|---------------------------|--------------------------|-------------------------|---------------------------|---------------------------|
| School 1 | School 2 | School 3 | School 4 | School 5 |
| 70.8% (412/582) | 70.1% (96/137) | 65.6% (61/93) | 74.1% (103/139) | 72.2% (114/158) |

Scottish general population: 44% (p < 0.0001; Well? What do you think? 2008)

Preliminary findings: Attitudes to Suicide

“Suicide is never justified no matter how bad things are”

| Strongly Agree / Agree | | | | |
|---------------------------|--------------------------|-------------------------|--------------------------|--------------------------|
| School 1 | School 2 | School 3 | School 4 | School 5 |
| 41.8% (240/574) | 23.9% (32/134) | 57.8% (52/90) | 67.4% (91/135) | 43.2% (64/148) |

p < 0.001

“People with incurable diseases should be allowed to commit suicide in a dignified manner”

| Strongly Agree / Agree | | | | |
|---------------------------|--------------------------|-------------------------|--------------------------|---------------------------|
| School 1 | School 2 | School 3 | School 4 | School 5 |
| 74.7% (429/574) | 48.5% (65/134) | 54.4% (49/90) | 32.6% (44/135) | 67.6% (100/148) |

p < 0.001

A Mixed Methods Approach

Qualitative Phase

- Questionnaire: what has it not told us?
- Semi-structured interviews
- Interpretative Phenomenological Analysis (IPA)
 - idiographic
 - privileges the individual's account
 - phenomenological
 - allows students to express what is important to *them*

Next steps

- Aim: to gain a greater insight into factors that contribute to, and exacerbate, mental ill-health
- Estimation and comparison of mental ill-health will be established
- Interviews to give first-hand accounts
- There are implications for interventions, education and counselling services

Only by supporting the needs of current students can we challenge the issues in the profession

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RVC

Royal Veterinary College
University of London



elewis@rvc.ac.uk