Merck Animal Health
Veterinary Wellbeing Study
Recent publications suggest that veterinarians have a high level of mental distress and elevated suicide rate.
Background & Purpose

• High levels of student debt combined with modest incomes have created serious enough concerns that AVMA conducted a major symposium on solutions
• Numerous reports of compassion fatigue and burnout exist in the profession
Goals

Definitively quantify the prevalence of mental illness and stress in the veterinary profession

Compare to previous studies and general US population
Objectives

- Determine levels of mental health and wellbeing using standardized tools with a representative sample of veterinarians
- Identify at-risk segments and contributing factors
- Suggest organizational and personal remedies and interventions if needed
Research Team

Ulrich Schimmack, PhD, University of Toronto
- Psychologist and wellbeing expert

Elizabeth Strand, PhD, LCSW, University of Tennessee CVM
- Licensed clinical social worker working in a veterinary setting

Linda Lord, DVM, PhD, Merck Animal Health (MAH)

Colin Siren, Kynetec Market Research

John Volk, Brakke Consulting
Methodology

- AVMA:
  - 20,000 randomly selected email addresses
  - Email letter alerting sample to upcoming study
- Email invitation + 2 reminders
- Incentive: Drawing for 20 $100 gift cards; contribution to AVMF
- Survey open Nov 2-16, 2017
- Average survey length 18.1 minutes.
- 3,540 usable, completed responses (17.7%)
- Data weighted based on age, gender and region of the US
- Margin of error +/- 1.62% at 95% confidence level
Two Key Measures

1. Serious psychological distress
   • i.e., Mental Health
   • Measured by standardized “Kessler 6” questions
Two Key Measures

2. Wellbeing

– Wellbeing examines the way individuals think and feel about their lives compared to the best/worst possible lives they can imagine.

– Measured and indexed using standardized questions
  
  • How satisfied are you with your life as a whole these days?
  
  • Suppose that the top of the ladder below represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. Where are you on the ladder?

  • Please indicate your agreement with the following statement: “In most ways, my life is close to my ideal.”
Many Factors Explored

- Student debt
- Stage of career
- Overall financial health
- Work-life balance
- Unnecessary euthanasia
- Practicing v. non
- Personality

- Relationships
- Involvement in healthy activities
- Involvement in unhealthy activities
- Attitude towards profession
Results Benchmarked

• **General population**
  - Mental Health and Wellbeing:
    • Panel Study of Income Dynamics, University of Michigan
  - NESARC-III, NIH
    • Suicide ideation and attempts, US adult population
  - Omnibus study
    • Questions regarding career recommendation

• **Veterinarians**
  - Others
Debt, Stress, Suicide Top Concerns
Among 11 tested

- **High Student Debt Levels**: 67% critically important, 24% moderately important, 5% minor issue, 2% not an issue, 2% DK/NS
- **Stress Levels of Veterinarians**: 53% critically important, 37% moderately important, 9% minor issue, 0% not an issue, 0% DK/NS
- **Suicide Rate Among Veterinarians**: 52% critically important, 29% moderately important, 11% minor issue, 2% not an issue, 6% DK/NS
- **Ability to Retire Comfortably**: 43% critically important, 37% moderately important, 13% minor issue, 4% not an issue, 3% DK/NS

Below are several issues you may or may not consider to be significant challenges faced by the veterinary profession today. Base: All Respondents: n=3,540

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Mental Health
Psychological Distress Consistent With US; Lower than Nett

- U.S. Veterinarians MAH Wellbeing Study 2017 (n=3,539): 94.7% Not Distressed, 5.3% Distressed
- U.S. Veterinarians Nett Study 2015 (n=11,627): 90.7% Not Distressed, 9.3% Distressed
- Employed General Population PSID (n=6,284): 95.3% Not Distressed, 4.7% Distressed

Significantly lower than Nett Study. Difference between MAH and PSID study not statistically significant.

Significantly higher than both MAH and PSID studies.
Distress Highest in Younger Vets

<table>
<thead>
<tr>
<th>Group</th>
<th>&lt;45 Years Old</th>
<th>45+ Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vets, Men</td>
<td>9.6%</td>
<td>2.6%</td>
</tr>
<tr>
<td>US Adults, Men</td>
<td>5.7%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Vets, Women</td>
<td>8.5%</td>
<td>3.8%</td>
</tr>
<tr>
<td>US Adults, Women</td>
<td>5.5%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

% Distressed
Psychological Distress Increases as Hours Worked Increases

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>&lt;30 Hours Weekly</th>
<th>30-44 Hours Weekly</th>
<th>45+ Hours Weekly</th>
<th>More than Desired</th>
<th>About the Right Amount</th>
<th>Less than Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=3,539</td>
<td>n=377</td>
<td>n=1,046</td>
<td>n=1,364</td>
<td>n=1,581</td>
<td>n=1,780</td>
<td>n=156</td>
</tr>
<tr>
<td>94.7%</td>
<td>97.7%</td>
<td>94.8%</td>
<td>93.1%</td>
<td>91.6%</td>
<td>97.3%</td>
<td>93.6%</td>
</tr>
<tr>
<td>5.3%</td>
<td>2.3%</td>
<td>5.2%</td>
<td>6.9%</td>
<td>8.4%</td>
<td>7.7%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

WBS. Results based on results of Kessler 6.
Student Debt a Driver of Psychological Distress

WBS. Results based on results of Kessler 6.
Doing Poorly Financially Associated with Serious Psychological Distress

Total Sample: n=3,539

- Doing Well Financially (T3B): 98.1%
- Doing Poorly Financially (L5B): 12.4%

Personal Finances:

- Doing Well Financially (T3B), n=1,552: 98.1%
- Doing Poorly Financially (L5B), n=178: 87.6%

Distressed Not Distressed

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Half Receiving Treatment

% Receiving Treatment or Medication for any Mental Health Condition

<table>
<thead>
<tr>
<th>Condition</th>
<th>Distressed (n=205)</th>
<th>Not Distressed (n=3,289)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major self-reported conditions of those distressed:</td>
<td>50%</td>
<td>14%</td>
</tr>
<tr>
<td>Depression</td>
<td>94%</td>
<td></td>
</tr>
<tr>
<td>Compassion fatigue/burnout</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>Anxiety, panic attacks</td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>

Statistically Significant Difference

MH1. Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?
MH11. Does your practice or company offer an Employee Assistance Program (a program that helps assist employees with personal problems).
Some Access Resources from Vet Organizations

% Have Accessed National/State Literature, Websites and/or Resources

- No, 90%
- Yes, 10%

16% among Distressed

If Yes, Which Did You Access

- AVMA: 64%
- VIN: 31%
- State VMA: 29%
- DVM360: 28%
- AAHA: 13%
- Other: 16%

MH12A. Some national and state veterinary organizations have literature, websites and other resources available regarding wellbeing and mental health. Have you ever accessed any of those resources?

MH12B. If yes, which ones?

MH13. How useful to you personally were the resources you used from each organization listed below?
Suicide Ideation and Attempts

% Suicide Ideation

- MAH Total Sample (Veterinarians): 24.9%
- Nett Study (Veterinarians): 16.8%
- NESARC-III-Total Sample (U.S. Gen.): 33.0%
- MAH Sub-sample (Veterinarians): 37.4%

% Suicide Attempt

- MAH Total Sample (Veterinarians): 1.6%
- Nett Study (Veterinarians): 1.4%
- NESARC-III-Total Sample (U.S. Gen.): 5.1%
- MAH Sub-sample (Veterinarians): 2.7%

Respondents who Experienced Depressive Symptoms (Lifetime)

Veterinarians/General Population

MH4. During the time when your mood was at its lowest/you enjoyed or cared the least about things, did you think about committing suicide?

MH5. During the time when your mood was at its lowest/you enjoyed or cared the least about things, did you attempt suicide?
### Psychologically Distressed Vets Less Likely to Participate in Healthy Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not Distressed, n=3,306</th>
<th>Distressed, n=209</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Yoga</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Meditate</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Volunteer</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>Travel</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>Religious Services</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Socializing</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Hobbies</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Reading</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Exercise</td>
<td>43%</td>
<td>58%</td>
</tr>
</tbody>
</table>

**Note:** Approximately how often do you do each of the following, if at all: Spend time with family
Most Helpful Activities To Prevent Distress

- Spending time with family
- Socializing with friends
- Traveling for pleasure
- Reading for pleasure
- Limiting time on social media
Wellbeing
Veterinarian Wellbeing Slightly Lower Than General Population

Segmentation Using MAH Wellbeing Index

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Men Veterinarians Higher, Women Lower Than General Population

- **Male**
  - U.S. Veterinarians MAH Wellbeing Study 2017, n=1,083
  - Employed General Population PSID, n=2,889
  - Men Veterinarians: 67.1% Suffering, 26.1% Getting By, 6.8% Flourishing
  - General Population: 61.6% Suffering, 31.1% Getting By, 7.3% Flourishing

- **Female**
  - U.S. Veterinarians MAH Wellbeing Study 2017, n=2,433
  - Employed General Population PSID, n=3,395
  - Women Veterinarians: 51.3% Suffering, 38.0% Getting By, 10.7% Flourishing
  - General Population: 60.8% Suffering, 31.9% Getting By, 7.3% Flourishing
Wellbeing Varies Significantly by Age

- **MAH Study Age: 18-34 n=1,088**
  - Suffering: 11.7%
  - Getting By: 41.4%
  - Flourishing: 46.9%

- **MAH Study Age: 35-44 n=587**
  - Suffering: 12.3%
  - Getting By: 37.7%
  - Flourishing: 50.0%

- **MAH Study Age: 45-54 n=765**
  - Suffering: 10.3%
  - Getting By: 36.9%
  - Flourishing: 52.8%

- **MAH Study Age: 55-64 n=731**
  - Suffering: 7.9%
  - Getting By: 28.1%
  - Flourishing: 64.0%

- **MAH Study Age: 65+ n=369**
  - Suffering: 7.9%
  - Getting By: 15.9%
  - Flourishing: 82.1%

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Age v. Gender

Among veterinarians under 45 – and 65+ – differences in wellbeing of men and women not statistically significant

Among veterinarians age 45-64, men on average exhibit higher levels of wellbeing than women
Among veterinarians under 45 – and 65+ – differences in wellbeing of men and women not statistically significant

Among veterinarians age 45-64, men on average exhibit higher levels of wellbeing than women
Hours Worked Dramatically Impacts Wellbeing

<table>
<thead>
<tr>
<th>Hours Worked Weekly</th>
<th>Total</th>
<th>&lt;30 Hours Weekly</th>
<th>30-44 Hours Weekly</th>
<th>45+ Hours Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Total Sample</td>
<td>58.3%</td>
<td>9.1%</td>
<td>32.6%</td>
<td>9.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n=3,539</td>
<td>n=377</td>
<td>n=1,046</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More than Desired</th>
<th>Total</th>
<th>&lt;30 Hours Weekly</th>
<th>30-44 Hours Weekly</th>
<th>45+ Hours Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>More than Desired</td>
<td></td>
<td>n=1,581</td>
<td>n=1,046</td>
<td>n=1,364</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>About the Right Amount</th>
<th>Total</th>
<th>&lt;30 Hours Weekly</th>
<th>30-44 Hours Weekly</th>
<th>45+ Hours Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the Right Amount</td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>More than Desired</td>
<td></td>
<td>n=1,581</td>
<td>n=1,046</td>
<td>n=1,364</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less than Desired</th>
<th>Total</th>
<th>&lt;30 Hours Weekly</th>
<th>30-44 Hours Weekly</th>
<th>45+ Hours Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than Desired</td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>More than Desired</td>
<td></td>
<td>n=1,581</td>
<td>n=1,046</td>
<td>n=1,364</td>
</tr>
</tbody>
</table>
Owners Report Higher Wellbeing than Associates

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total Sample n=3,539</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>58.3% 32.6% 9.1%</td>
</tr>
<tr>
<td>Role Within Practice</td>
<td></td>
<td></td>
<td>62.9% 48.6% 12.5%</td>
</tr>
<tr>
<td>Owners - Gender</td>
<td>65.8% 30.4% 3.8%</td>
<td>57.9% 34.8% 7.3%</td>
<td></td>
</tr>
<tr>
<td>Associates - Gender</td>
<td>53.0% 33.5% 13.4%</td>
<td>47.4% 40.6% 12.0%</td>
<td></td>
</tr>
</tbody>
</table>

Suffering | Getting By | Flourishing

Segmentation Using MAH Wellbeing Index

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Student Debt Impacts Wellbeing, Regardless of Amount

**Level of Student Debt**

<table>
<thead>
<tr>
<th>Total Sample</th>
<th>None (n=2,097)</th>
<th>$1-$99,999 (n=573)</th>
<th>$100,000-$199,999 (n=410)</th>
<th>$200,000+ (n=460)</th>
</tr>
</thead>
<tbody>
<tr>
<td>58.3%</td>
<td>65.6%</td>
<td>47.7%</td>
<td>41.8%</td>
<td>40.8%</td>
</tr>
<tr>
<td>32.6%</td>
<td>28.3%</td>
<td>38.0%</td>
<td>43.2%</td>
<td></td>
</tr>
<tr>
<td>9.1%</td>
<td>6.1%</td>
<td>14.3%</td>
<td>15.0%</td>
<td>15.6%</td>
</tr>
</tbody>
</table>

Segmentation Using MAH Wellbeing Index

- **Suffering**: A
- **Getting By**: B, C, D

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Doing Poorly Financially Has Major Impact on Wellbeing

Total Sample
n=3,539

- 58.3% Doing Well Financially
- 32.6% Doing Poorly Financially
- 9.1% Others

Personal Finances

- Doing Well Financially
  - T3B (8-10)
    - n=1,552
    - 79.3% Flourishing
    - 18.2% Getting By
    - 2.5% Suffering

- Doing Poorly Financially
  - (0-5)
    - n=788
    - 47.0% Suffering
    - 26.0% Getting By
    - 27.0% Flourishing
“Flourishing” Veterinarians Much More Likely to Engage in Healthy Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Flourishing Veterinarians, n=1,948</th>
<th>Suffering Veterinarians, n=350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media</td>
<td>18%</td>
<td>11%</td>
</tr>
<tr>
<td>Yoga</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Meditate</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Volunteer</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Travel</td>
<td>31%</td>
<td>23%</td>
</tr>
<tr>
<td>Religious Services</td>
<td>35%</td>
<td>14%</td>
</tr>
<tr>
<td>Socializing</td>
<td>36%</td>
<td>10%</td>
</tr>
<tr>
<td>Hobbies</td>
<td>44%</td>
<td>13%</td>
</tr>
<tr>
<td>Reading</td>
<td>51%</td>
<td>27%</td>
</tr>
<tr>
<td>Exercise</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>Family Time</td>
<td>27%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Statistically Significant Difference

DEM 9. Approximately how often do you do each of the following, if at all: Spend time with family
Work Factors Associated Most with Wellbeing

- Higher income
- Working fewer hours
- Lower student debt
- Being an owner
- Not working evenings
Non-Work Factors Associated Most with Wellbeing

- Traveling for pleasure
- Spending time with family
- Socializing with friends
- Having a hobby
- Exercising
- Being married/in relationship
Comparing Mental Health vs. Wellbeing Results

### Mental Health
- **94.7%** Not suffering from serious psychological distress
- **5.3%** Suffering from serious psychological distress

### Wellbeing
- **58.3%** Flourishing
- **32.6%** Getting By
- **9.1%** Suffering

Percentage of Veterinarians not suffering from serious psychological distress.

Percentage of Veterinarians with a high level of wellbeing.

Percentage of Veterinarians with a low level of wellbeing.
Interrelationship Between Mental Health and Wellbeing

<table>
<thead>
<tr>
<th></th>
<th>Flourishing n=1,935</th>
<th>Getting By n=1,233</th>
<th>Suffering n=349</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distressed</td>
<td>0%</td>
<td>8%&lt;sup&gt;A&lt;/sup&gt;</td>
<td>28%&lt;sup&gt;AB&lt;/sup&gt;</td>
</tr>
<tr>
<td>Not Distressed</td>
<td>100%&lt;sup&gt;BC&lt;/sup&gt;</td>
<td>92%&lt;sup&gt;C&lt;/sup&gt;</td>
<td>72%</td>
</tr>
</tbody>
</table>

Only 28% of those with low wellbeing are identified as having serious psychological distress.
Recommend the Profession

Only 41% of veterinarians recommend a career in veterinary medicine

- **Veterinarians**
  - Yes, 41%
  - No, 33%
  - Don't Know/Not Sure, 26%

- **General Population**
  - Yes, 70%
  - No, 13%
  - Don't Know/Not Sure, 17%

- **Physicians - 2016**
  - Yes, 51%
  - No, 49%

Source: Omnibus Study

Source: Survey of America’s Physicians, 2016

CLINIC 9a. Would you recommend a career in veterinary medicine to a friend or family member?
Why Career not recommended

- Compensation Related: 54%
- Student Debt/Costs Related: 53%
- Personal Toll Related: 44%
- Work/Life Balance Related: 36%
- Client Related: 28%
- Expectations/Reality Related: 20%
- Employer/Workplace Related: 16%

All Respondents (n=1,266)
Conclusions & Recommendations
Conclusions

Veterinary Medicine is not in a state of crisis. About 1 in 20 veterinarians are suffering serious psychological distress, consistent with what is found in the general population.

Significant challenges exist, however, particularly with younger veterinarians.
Some serious psychological distress is associated with non-work-related attributes. However, student debt, income and some work-related factors are strongly associated with psychological distress.
Conclusions

Those with serious psychological distress and poor wellbeing are far more likely to spend more time on social media and less time on healthy activities (e.g., time with family and friends, recreation, exercise).
There’s a mental health treatment gap in veterinary medicine. While many veterinarians with serious psychological distress are getting treatment, a significant population is not. Few employers offer Employee Assistance Programs.
Conclusions

Veterinarians as a whole have slightly lower levels of wellbeing than the general population. Interestingly, older, more experienced veterinarians as a group experience higher levels of wellbeing than the general population.
Conclusions

Contributing to low wellbeing:

• Student debt
• Low income
• Working long hours
• Relief work
Conclusions

Contributing to high wellbeing:
- Marriage/relationship
- Socializing with friends
- Satisfactory family life
- Engaging in healthy activities
  - Exercise, travel, hobbies

Job satisfaction, where it exists, is a stronger predictor of wellbeing than in the general population
Conclusions

Veterinarian do not strongly endorse the profession, even many that score high in wellbeing and mental health.

Reasons:
- Low incomes,
- High student debt
- Personal toll the profession takes
- Poor work-life balance
Recommendations

More could be done to promote wellbeing, create awareness of mental health issues and help those at risk find acceptance and treatment.
Recommendations

Veterinary Organizations

- Educate constituents about signs, symptoms and rates of mental illness among veterinarians

- Reduce barriers to seeking help:
  - Develop a national hotline where those who are distressed can find counseling and other help.
  - Provide and require veterinary CE in the skills of emotional crises management and suicide prevention
Reduce barriers to seeking help:

- Establish peer to peer support networks for mental health
- Engage innovative tele-behavioral health solutions to make access to mental health care more flexible, inexpensive, and time efficient.
Recommendations

Veterinary Organizations

- Evaluate, improve and more effectively publicize existing organizational wellness resources

- Continue to seek ways to reduce student debt and improve financial conditions in the profession, especially for young veterinarians.
Recommendations

Veterinary Colleges

- Require students to develop and engage stress management behaviors while in school.
- Continue to expand scholarship opportunities for students
- Extend services of veterinary mental health professionals to alumni
Recommendations

Employers

- Educate employees on the existence of mental health issues and provide time off for appointments with physicians and counselors
- Outwardly discuss and set healthy practice expectations for work/life balance
Recommendations

Employers

- Create mentoring programs for new employees to help them gain the skills and confidence needed to perform satisfactorily in their career
- Consider partnering with in-practice veterinary social work professionals
Recommendations

You

- With the help of a mental health professional or coach develop a stress management plan
- Budget time for healthy activities such as family time, socializing with friends, recreation and exercise
- Retain a certified financial planner to develop a plan to manage finances and student debt
Recommendations

**You**

- Limit social media time to an hour per day or less
  - Take periodic “sabbaticals” from social media
- Be vigilant for signs of psychological distress in yourself and others; seek help or encourage others to seek help
- Show support for others’ efforts towards wellness
  - *(i.e. “Good job getting out of the clinic at 5:15 today!)*
For More Information

http://www.vetwellbeing.com