Disability in Canadian Military Veterans
Released Since 1998: Implications for Rehabilitation

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Lessons Learned in Medical Rehabilitation and Re-Integration: An International Perspective
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This Presentation

1. Describe the CAF ex-service (Veteran) population.
2. Disability and well-being models.
3. *Life After Service Studies* program of research.
4. Implications for rehabilitation.
5. VAC Rehabilitation Program.
Canadian Ex-Military (Veteran) Population*

WW II and Korean War Veterans now aged 80s-90s

- 69,700 living.

Recent Veterans after the Korean War

- 600,400 living.
- No typical Veteran:
  - More than 75 Special Duty Areas around the world.
  - Age 20s to 90s, average age 57.
  - Growing proportion of women (1:8).
  - All education levels, all income brackets.
  - Most enter civilian workforce on leaving service.

88,300 participating in VAC programs (serving and released):
  - Apply to VAC up to decades after leaving service, no time limits on VAC supports.

*VAC Statistics Directorate, March 2016
# Veterans in Perspective

<table>
<thead>
<tr>
<th></th>
<th>USA</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Ranking of Military Powers</td>
<td>#1</td>
<td>#20</td>
</tr>
<tr>
<td>Size of Military</td>
<td>1.4 million Active Force and 1.1 million Reserves</td>
<td>66,000 Regular Force and 39,000 Reserve Force</td>
</tr>
<tr>
<td># Veterans (% of Adult Population)</td>
<td>21.4 Million (8.5%)</td>
<td>700,000 (2%)</td>
</tr>
<tr>
<td># Releasing Annually (2015)</td>
<td>218,000</td>
<td>~ 10,000</td>
</tr>
</tbody>
</table>
Afghanistan Cohort

41,600 2001 to 2013

20% Released

80% Still Serving
Two Meanings of “Disability”

Meaning #1:
• Health-related functional impairments.
• A characteristic of the person.

Meaning #2:
• Restricted participation in life roles.
• Biopsychosocial ecological viewpoint.

Population surveys tend to get at #1 but not #2
Many Meanings for “Well-Being”

• Compound word “being”+“well”, dates to 1610.
• Means different things to different people.
• Multiple constructs vary by discipline.
• Lack of a clear construct hampers services, policy, programming and research.
Successful Transition: Good Well-being

<table>
<thead>
<tr>
<th>Well-being Domain</th>
<th>Veterans (Ex-Military) are...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employment or other meaningful activity</td>
<td>Engaged in activities that are beneficial and meaningful to them</td>
</tr>
<tr>
<td>2. Finances</td>
<td>Financially secure</td>
</tr>
<tr>
<td>3. Health</td>
<td>Functioning well physically, mentally, socially and spiritually</td>
</tr>
<tr>
<td>4. Life skills &amp; preparedness</td>
<td>Able to adapt, manage, and cope within civilian life</td>
</tr>
<tr>
<td>5. Social integration</td>
<td>In mutually supportive relationships and are engaged in their community</td>
</tr>
<tr>
<td>6. Housing &amp; Physical Environment</td>
<td>Living in safe, adequate and affordable housing</td>
</tr>
<tr>
<td>7. Cultural &amp; Social Environment</td>
<td>Understood and valued by the nation</td>
</tr>
</tbody>
</table>
Theory of Well-being

Relationships between the Domains

• Determinants of well-being in one domain derive from the other domains.
• E.g. – the determinants of health.
• But causality is bidirectional.
Canadian Veterans: Life After Service Studies

Life After Service Studies 2010, 2013, and 2016:

- Surveys of Canadian Armed Forces Veterans.
- Released from 1998.
- Living in the general Canadian population.
- Surveyed <15 years after release.

*Veteran = ex-military, regardless of type or length of service.
Prevalence of Chronic Conditions

CAF Regular Force Veterans Released Since 1998

Prevalence

- Mood disorder
- Anxiety disorder
- PTSD
- Arthritis
- Back problems
- Chronic pain
- Obesity
- Cardiovascular
- Migraine
- Hearing problems
- Gastrointestinal
- Respiratory
- Cancer

Reg Force Veterans (Mental Health)
Reg Force Veterans (Physical Health)
Canadian General Population

LASS 2013
Prevalence of Disability

Health-Related Activity Limitations (blue):
Long-term physical or mental condition or health problem reduces amount or kind of activity in home, work, school, other.

Assistance with Activities of Daily Living (red):
Because of physical or mental health condition or problem, needed assistance with at least one BADL or IADL.

Compared to General Population:

Personal and Environmental Factors Correlated with Activity Limitations

- Increasing age
- Women
- Non-degree post-secondary education
- Low income
- Junior non-commissioned member rank
- Deployment
- Low social support
- Low mastery
- High life stress
- Weak sense of community belonging

Regular Force, LASS 2010, Multivariable regression modelling
# Chronic Health Conditions & Activity Limitations

<table>
<thead>
<tr>
<th>Diagnosed Chronic Health Condition</th>
<th>Population Estimate</th>
<th>Odds Ratios of Limitations§</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unadjusted</td>
</tr>
<tr>
<td>Pain or Discomfort</td>
<td>65%</td>
<td>27.3***</td>
</tr>
<tr>
<td>Mental Health condition</td>
<td>24%</td>
<td>7.9***</td>
</tr>
<tr>
<td>Musculoskeletal condition</td>
<td>49%</td>
<td>9.3***</td>
</tr>
<tr>
<td>Hearing Problem</td>
<td>28%</td>
<td>2.6***</td>
</tr>
<tr>
<td>Cardiovascular condition</td>
<td>21%</td>
<td>2.4***</td>
</tr>
<tr>
<td>Gastrointestinal condition</td>
<td>11%</td>
<td>4.6***</td>
</tr>
<tr>
<td>Respiratory condition</td>
<td>8%</td>
<td>2.6***</td>
</tr>
<tr>
<td>Obesity</td>
<td>28%</td>
<td>1.8***</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6%</td>
<td>2.9***</td>
</tr>
<tr>
<td>Cancer</td>
<td>1%</td>
<td>2.2*</td>
</tr>
</tbody>
</table>

§Compared to those without the condition.

*p<0.05, **p<0.01, ***p<0.001
# Comorbidity of Physical and Mental Health Conditions

<table>
<thead>
<tr>
<th>Percent of Population</th>
<th>No Limitations</th>
<th>Some Limitations</th>
<th>High Limitations</th>
<th>Adjusted Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Health Conditions</td>
<td>33%</td>
<td>&lt;1%</td>
<td>17%</td>
<td>1.00</td>
</tr>
<tr>
<td>Mental only</td>
<td>2%</td>
<td>&lt;1%</td>
<td>1%</td>
<td>9*** (3-30)</td>
</tr>
<tr>
<td>Physical only</td>
<td>59%</td>
<td>71%</td>
<td>38%</td>
<td>25*** (12-52)</td>
</tr>
<tr>
<td>Both Physical and Mental</td>
<td>7%</td>
<td>28%</td>
<td>23%</td>
<td>73*** (34-157)</td>
</tr>
</tbody>
</table>

Odds of having activity limitations **four times** higher in those with both physical and mental health conditions than either one alone.

“Health” is Both Physical and Mental

Dr. Roger Ladouceur*: 

“When a patient is anxious, cannot sleep or is ‘on edge’; or when he is depressed, discouraged or overcome with sadness or despair, it is hardly the time to offer advice on managing a chronic [physical] health problem.”

*Canadian Family Physician, February 2014

Corollaries:

1. Psychotherapy hard when the patient is distracted by symptoms of a physical health condition.

2. Is the “psychological” symptom in fact caused by an unrecognized physical health condition?
Adjustment to Civilian Life

Higher Likelihood Easy

• No chronic health problems.
• Few health-related limitations.
• Employed.
• Satisfied with finances or job/main activity.
• High life satisfaction, strong sense of being in control of life and community belonging.
• High level of social support.
• Absence of suicidal thoughts.

Higher Likelihood Difficult

• Mental health problems.
• Physical health conditions.
• Chronic pain.
• Not being employed.
• Mid-career release all types.
• Army.
• NCM rank.
Implications for Rehabilitation

Practice:
1. Biopsychosocial approach.
2. Attend to both physical and mental health.
3. Attend to all the domains of well-being.
4. Outreach to ensure program reach.

Research:
1. Extent of role disability?
2. Best ways to reduce social and physical environmental barriers.
3. Evidence for programs addressing different domains of well-being in disability mitigation.
New Veterans Charter

• Suite of programs implemented in 2006 to meet the transition needs of modern-day Veterans and families.
  – Comprehensive Rehabilitation Program
  – Financial Benefits
  – Health Benefits
  – Disability and Death Benefits
  – Career Transition Services

• Supported by one-on-one Case Management and Mental Health Services
VAC Rehabilitation Program

Eligibility:

- Medically released within 120 days, or
- Service-related health problem making it difficult to adjust to life in home, work or community.

Contracted rehabilitation services in three areas:

- **Medical**: Health professionals stabilize and restore health.
- **Psychosocial**: Health & rehabilitation professionals promote skills to adjust to living independently with health problems.
- **Vocational**: Vocational professionals work with Veterans to transfer skills and education to build a rewarding civilian career.

http://www.veterans.gc.ca
VAC Rehabilitation Program Delivery

VAC Case Managers
  – Develop, implement and monitor case plans.

Community-based service providers
  – Provide medical and psychosocial services.
  – Registered by Medavie Blue Cross who also does claims processing for travel, treatment and provider services.

Canadian Veterans Vocational Rehabilitation Services
  – National contractor of vocational services.
  – Conduct vocational assessments and develop and implement vocational plans.
  – Claims processing for vocational rehabilitation expenses such as tuition, books, dependent care and others.

http://www.veterans.gc.ca
Rehabilitation Program Outcomes

When compared with those entering the program, Rehabilitation Program clients at program completion:

• have better mental and physical health status & are less at risk for depression;
• are more often employed (72% of those not retired or unable to work due to disability are employed);
• feel better prepared to find and keep civilian employment, and are more knowledgeable about job finding activities;
• are better able to meet their basic living expenses (92% report they are able to meet these expenses);
• are more likely, at 25%, to report a strong sense of belonging to their local community;
• are more involved in the day-to-day activities of their families, at 66%; and
• are more likely to feel recognized, at 43%, for their military service.

*Source: Re-establishment Survey 2013-2014*