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Somatic and functional complaints after military combat

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Aim

- Introduction of typical somatic and functional complaints seen among veterans after being deployed
 - Complaints in civilian populations vs. Veteran populations
 - Consequences over time



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Somatic and functional complaints after combat

- Increased rates reported in many controlled epidemiological studies
- Especially being described after the Persian Gulf war in 1990-91



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Somatic and functional complaints among 686 Danish Gulf War veterans (G) vs. matched army controls

Diseases or symptoms during the preceding 12 months	Symptom/disease onset before the Gulf/August 1990		P
	G n=686 %	C n=231 %	
Repeated fits of headache	7.4	8.2	NS
Blurred vision, not improved by the use glasses	1.2	0.9	NS
Numbness or tingling in hands or feet	2.8	1.3	NS
Balance disturbances or fits of dizziness	2.8	2.2	NS
Suddenly diminished muscular power	0.4	0.0	NS
Depression or sadness	4.5	3.5	NS
Concentration or memory difficulties	2.3	2.2	NS
Abnormal feeling of fatigue (not caused by physical activity)	1.9	1.7	NS
Problems with fatigue lasting more than 24 hours after having made a physical effort	0.9	2.2	NS
Problems falling asleep	4.2	3.0	NS
Problems sleeping all night	3.2	3.0	NS
Unusual feeling of fatigue during the day	1.7	1.7	NS
Awakening with a feeling of fatigue and exhaustion after a whole night's sleep	3.2	3.5	NS
Nightmares	3.4	2.6	NS
Feeling of nervousness, irritability or agitation	2.9	2.2	NS
Tingling or shivering of arms, legs, or other parts of the body	1.3	1.3	NS
Disturbances of speech, trouble finding and pronouncing words correctly	1.7	2.6	NS



Somatic and functional complaints among 686 Danish Gulf War veterans (G) vs. matched army controls

Diseases or symptoms during the preceding 12 months	Symptom/disease onset before the Gulf/August 1990			Symptom/disease onset during or after the Gulf/August 1990		
	G n=686 %	C n=231 %	P	G %	C %	P
Repeated fits of headache	7.4	8.2	NS	19.2	6.5	<0.001
Blurred vision, not improved by the use glasses	1.2	0.9	NS	6.4	1.7	<0.01
Numbness or tingling in hands or feet	2.8	1.3	NS	14.1	7.8	<0.01
Balance disturbances or fits of dizziness	2.8	2.2	NS	13.6	3.9	<0.001
Suddenly diminished muscular power	0.4	0.0	NS	2.5	0.4	<0.05
Depression or sadness	4.5	3.5	NS	22.6	10.4	<0.001
Concentration or memory difficulties	2.3	2.2	NS	31.2	8.2	<0.001
Abnormal feeling of fatigue (not caused by physical activity)	1.9	1.7	NS	26.4	10.8	<0.001
Problems with fatigue lasting more than 24 hours after having made a physical effort	0.9	2.2	NS	10.9	4.8	<0.05
Problems falling asleep	4.2	3.0	NS	19.4	9.1	<0.001
Problems sleeping all night	3.2	3.0	NS	19.8	6.9	<0.001
Unusual feeling of fatigue during the day	1.7	1.7	NS	24.8	10.0	<0.001
Awakening with a feeling of fatigue and exhaustion after a whole night's sleep	3.2	3.5	NS	25.2	11.3	<0.001
Nightmares	3.4	2.6	NS	8.6	3.5	<0.01
Feeling of nervousness, irritability or agitation	2.9	2.2	NS	21.0	9.1	<0.001
Tingling or shivering of arms, legs, or other parts of the body	1.3	1.3	NS	9.0	3.0	<0.01
Disturbances of speech, trouble finding and pronouncing words correctly	1.7	2.6	NS	12.7	3.9	<0.001



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Somatic and functional complaints among 686 Danish Gulf War veterans (G) vs. matched controls

Gastro-intestinal symptoms

Diseases or symptoms during the preceding 12 months	Symptom/disease onset during or after the Gulf/August 1990		
	G %	C %	P
Irritated bowel syndrome	3.8	0.9	<0.05
Recurrent diarrhoea	17.2	3.9	<0.001
Loose or aqueous stools	19.4	7.8	<0.001
Stomach ache	13.4	6.9	<0.01
Dyspepsia or esophageal disease	16.9	7.8	<0.001
Vomiting	4.1	1.3	<0.05
Rumbling in the stomach more than a couple of times a week	12.4	2.6	<0.001
Alternating loose and hard stools	16.3	6.5	<0.001

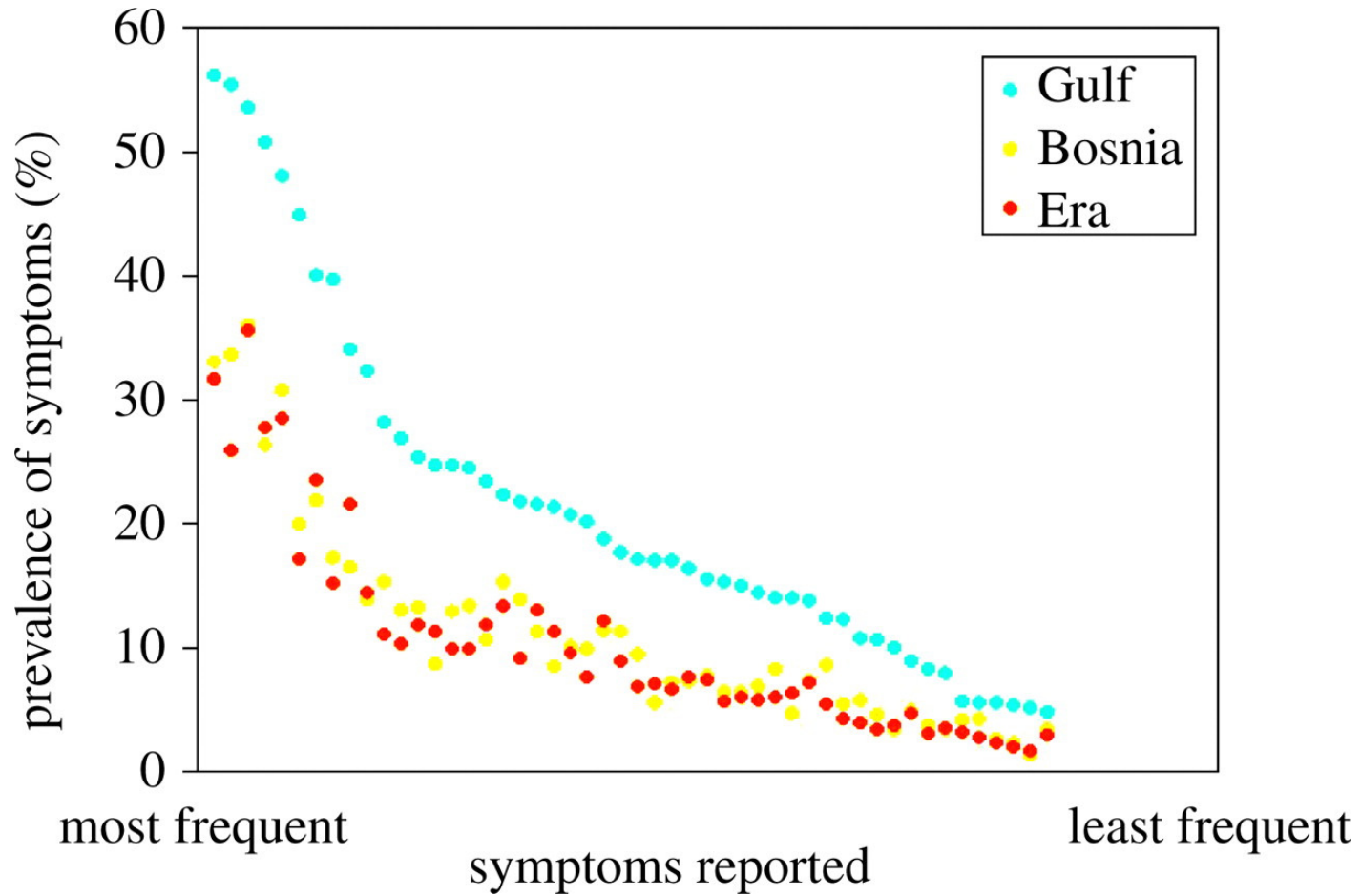
Skin problems and symptoms of an allergic nature

Lifetime prevalence of	Symptom/disease onset during or after the Gulf/August 1990		
	G %	C %	P
Eczema	15.0	3.0	<0.001
Retarded wound healing	6.0	1.7	<0.01
Other forms of skin problems	17.1	5.2	<0.001
Any hair loss or hair disease	4.2	0.9	<0.01
Sweaty, clammy or damp hands	7.9	3.9	<0.05
Allergic eye symptoms	9.3	4.8	<0.05
Allergic oedemas of face, eyes or lips	1.7	0.0	<0.05
Nuisances after vaccination	2.8	0.4	<0.05



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Distribution of 50 symptoms in the Health Survey of UK Military Personnel 1991





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Possible explanations for increased somatic complaints among Gulf War Veterans

- Reactions due to vaccinations against anthrax [miltbrand]
- Use of bromide tablets [descificering - sikring af vandhygiejne]
- Depleted uranium munitions
- Pesticides
- Burning oil
- Stress

- With few exceptions, these claims have not been substantiated
- Medically unexplained symptoms...



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Physical symptoms in the past 4 weeks among 695 Danish Iraq war veterans (2003-05) at homecoming
96.5% men and 66% < 30 years,

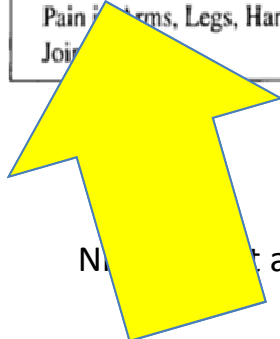
Symptom	Number Reporting Symptom/Total (%)
Recurrent Headache	71/695 (10.2)
Severe Fatigue	43/695 (6.2)
Frequent Coughing With Mucus	33/695 (4.7)
Shortness of Breath During Light Exercise	64/695 (9.2)
Heart Pounding or Racing	21/695 (3.0)
Chest Pain	19/695 (2.7)
Nausea	24/695 (3.5)
Stomach Pain	48/695 (6.9)
Constipation	15/695 (2.2)
Diarrhea	54/695 (7.8)
Frequent or Painful Urination	7/695 (1.0)
Eczema or Rash on the Skin	49/695 (7.1)
Back Pain	110/695 (15.8)
Pain in Arms, Legs, Hands, or Feet	38/695 (5.5)
Joint Swelling	18/695 (2.6)

Physical symptoms in the past 4 weeks among 695 Danish Iraq war veterans (2003-05) at homecoming
96.5% men and 66% <30 years

Physical symptoms in the past 2 weeks among 2362 Danish men (2005)
25-44 years

Symptom	Number Reporting Symptom/Total (%)
Recurrent Headache	71/695 (10.2)
Severe Fatigue	43/695 (6.2)
Frequent Coughing With Mucus	33/695 (4.7)
Shortness of Breath During Light Exercise	64/695 (9.2)
Heart Pounding or Racing	21/695 (3.0)
Chest Pain	19/695 (2.7)
Nausea	24/695 (3.5)
Stomach Pain	48/695 (6.9)
Constipation	15/695 (2.2)
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Joint Pain	18/695 (2.6)

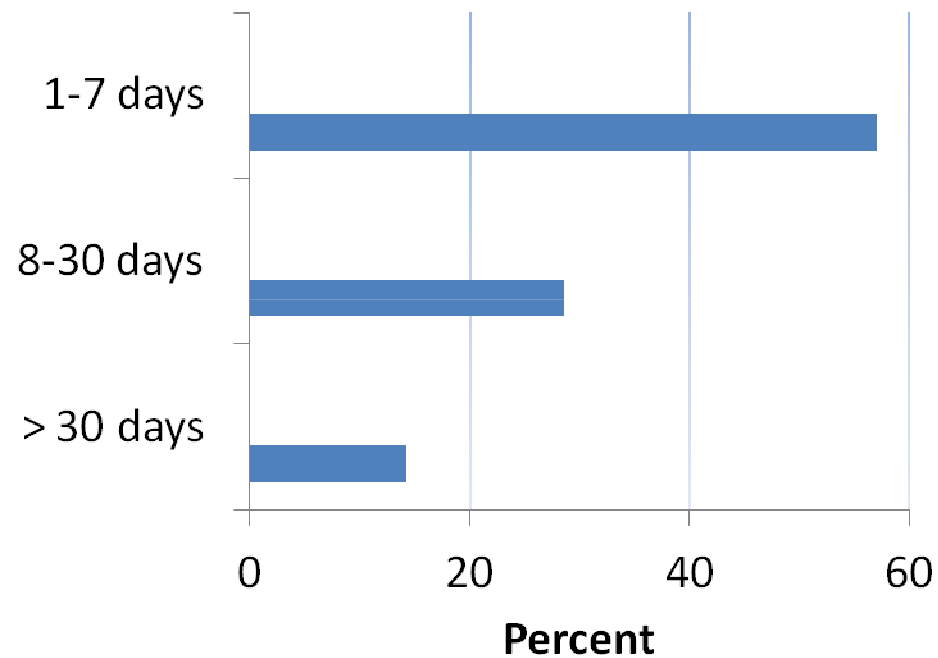
Symptom	%
Headache	22.9
Fatigue	25.5
Cold, rhinitis or coughing	19.5
Breathing difficulty	4.5
Rapid palpitation	3.9
Indigestion, diarrhoea or constipation	5.1
Stomach-ache	5.1
Eczema, rash or itching	8.6
Pain or discomfort in the back or lower back	25.8
Pain or discomfort in the arms, hands, legs, knees, hips or joints	23.1





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175 (20%) of 860 Danish Iraq war veterans (2003-05)
have had low back pain during past 12 months



32% had reduced physical activity
29.7% have had sick leave



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What are related to somatic and functional complaints after war combat?

- Danish Iraq war veterans with many symptoms had more often:
 - witnessed attacks on civilians (OR: 2.93, 95% CI: 1.35-6.32)
 - Afraid of being physically harmed (OR: 3.54, 95% CI: 1.38-9.06)
 - Felt unsafe outside the camp (OR: 3.94, 95% CI: 1.70-9.10)
 - Felt that the mission was hopeless (OR: 2.93, 95% CI: 1.35-6.35)
 - Been in touch with prisoner of war (OR: 2.81, 95% CI: 1.24-6.36)



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What are related to somatic and functional complaints after war combat?

- Higher rates of somatic complaints among Israeli veterans with PTSD vs. N-PTSD both veterans with and without combat stress reaction (Solomon and Mikulincer, 1987, Benyamini et al. 2009)
 - PTST -> pressure -> emotional and behavioural difficulties
 - Hard demanding physical job in a dusty and unsecure environment -> somatic complaints continue after deployment



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Consequences of somatic and functional complaints

- 3-4 times higher rates of chronic fatigue syndrome, multi-symptoms among Gulf War veterans vs. non-deployed (meta-analysis, Hollie et al., 2006)
- The UK military Gulf cohort rated their health poor but only minor physical functioning differences were seen and still about expected non-military personnel (Greenberg et al., 2009)
- Symptom reporting related to poor self-rated health.
 - higher risk for future sick leave, health care use, CHD, mortality compared to good self-rated health (Jylhä, Soc Sci Med 2009, Benyamini, Psychology & Health 2011; Nielsen et al., SJPB 2008)



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Conclusion

- Common complaints
- Somatic and functional complaints after military combat are in general not higher as compared with matched controls
 - except for combat exposure (+ PTSD) and Gulf War veterans
- Poor self-rated health related to complaints
- Examination of complaints and PTSD before and after deployment may be necessary



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Perspectives

- Examine somatic and functional complaints among Danish Afghanistan War veterans (SCL-90-R)
- New data collection with focus on somatic complaints
 - Bodily distress syndrome vs. PTSD
- Mission preparation, briefing, debriefing
- Should the investigation of veterans who turn to psychologists spend more time on somatic complaints?

Thank you

