

To regret or not to regret, does it matter for physicians' later functioning?

A nationwide and longitudinal study over 15/20 years after leaving medical school (NORDOC).

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To regret (Webster's unabridged Dictionary)

2

- **To feel:**
- **Sorrow**
- **Remorse**
- **Vanishment**
- **Loss**
- **Disappointment**
- **Dissatisfaction**

Regretting

3

Negative feelings with impact upon:

- Quality of life
- Interpersonal functioning
- Family life
- Work
- Social life
- Fullfillment

Source of regretting

4

- **Situation/context?**

or

- **Personality?**

or

Both?

Background

5

Do physicians regret choosing medicine?

- A survey among 24,000 US doctors showed a decline from **69%** in 2011 to **58%** in 2014 that would **choose medicine** once more

<http://www.forbes.com/sites/susanadams/2012/04/27/why-do-so-many-doctors-regret-their-job-choice/>

Background (cont.)

6

- Among UK GPs, increase from 14% (1998) to 22% (2001) in intention to leave within the next five years.
- Reason: **Decrease** in job satisfaction.

Sibbald B1, Bojke C, Gravelle H. National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ. 2003.

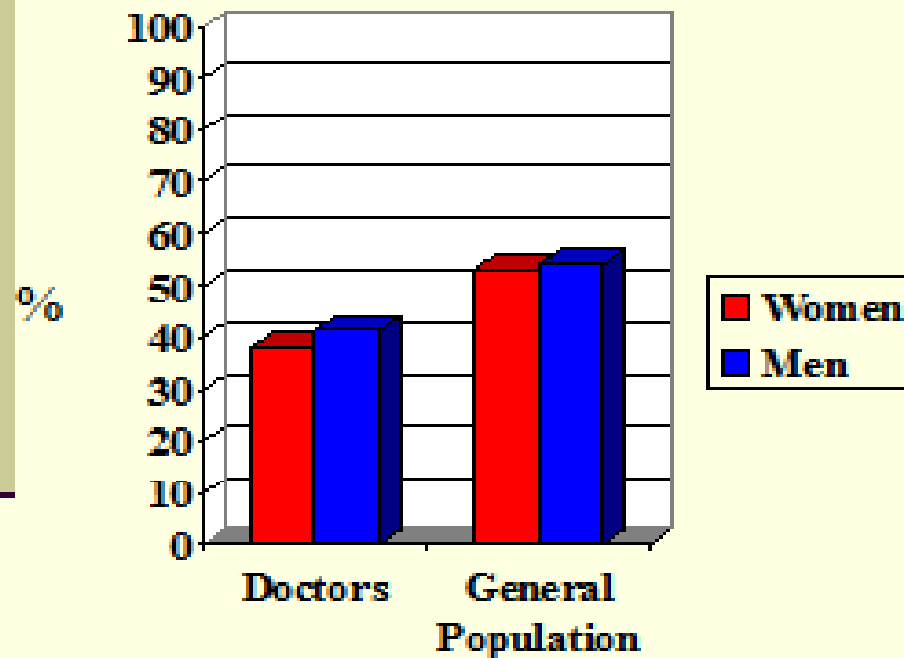
Background (cont.)

7

- **Supposed effects of **NOT regretting/being** satisfied with job among young and mid-career doctors:**
- **Motivation for work**
- **Giving optimal patient care**
- **Enduring stress, esp. in the emergency room**
- **Stay healthy**
- **«Pay back» to society for an expensive education**

Norwegian doctors vs. gen. Population 8

Very/extremely satisfied with life
PGY- 9/10

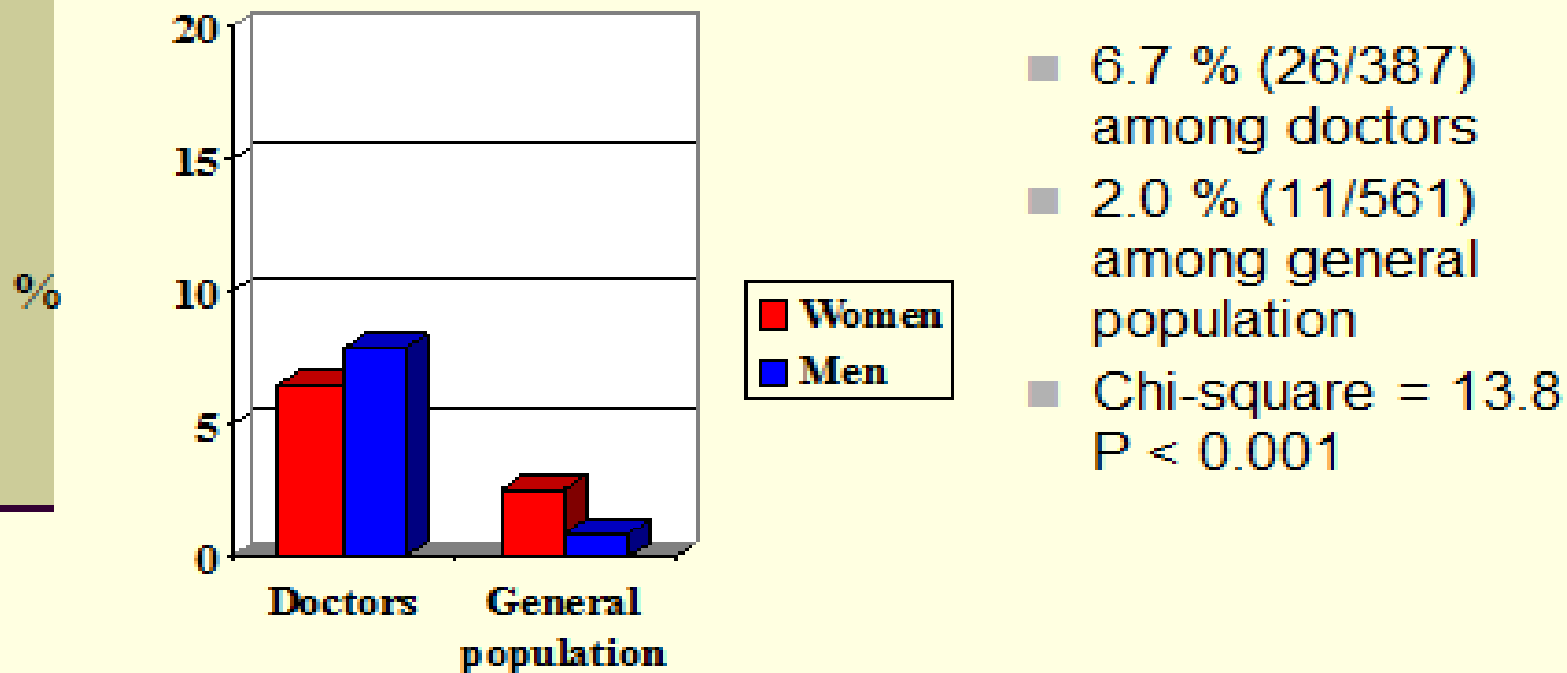


- 40% among doctors
- 1/2 (or more) among general population
- Statistics (doctors vs. general population):
Chi-Square = 18.5
P<0.001

(Tyssen et al 2009)

Norwegian doctors vs. gen. Population 9

Dissatisfied with life (any category) in PGY-9/10



(Tyssen et al 2009)

Theoretical model

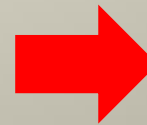
**Situational
factors
work,
fam./social**

**Personality
traits**

**To
regret**

**Job Stress
Burnout
Psychological
distress**

**Perceived
skills
Well-being
Job
satisfaction**



Aims

11

- **On this background, we wanted to investigate:**
 - a) The magnitude of the problem with regretting**
 - b) What characterizes doctors who regret**
 - c) What consequences regretting as a graduating student may have later in the career.**

Sample

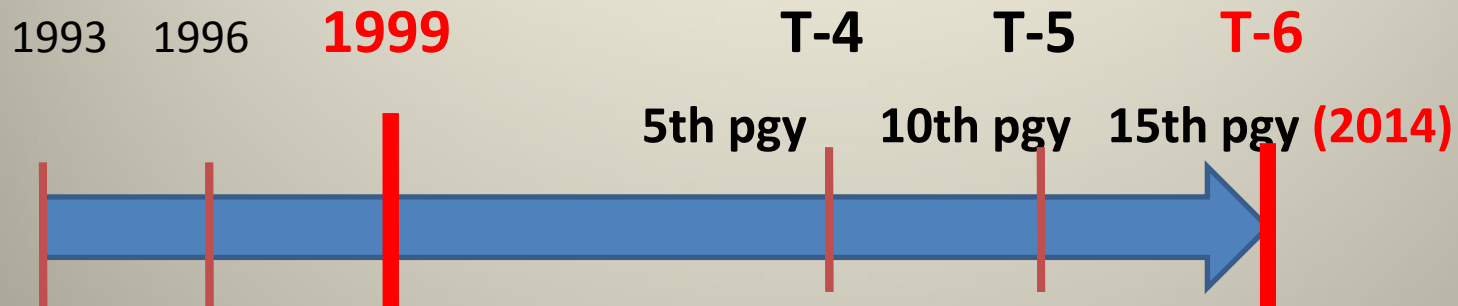
12

- **Two cohorts (NORDOC) comprised of participants from all Medical Schools at Norwegian universities:**
 - **1. Students starting 1993 and graduating 1999 (NORDOC I)**
 - **2. Physicians graduating in 1993/94 (NORDOC II)**

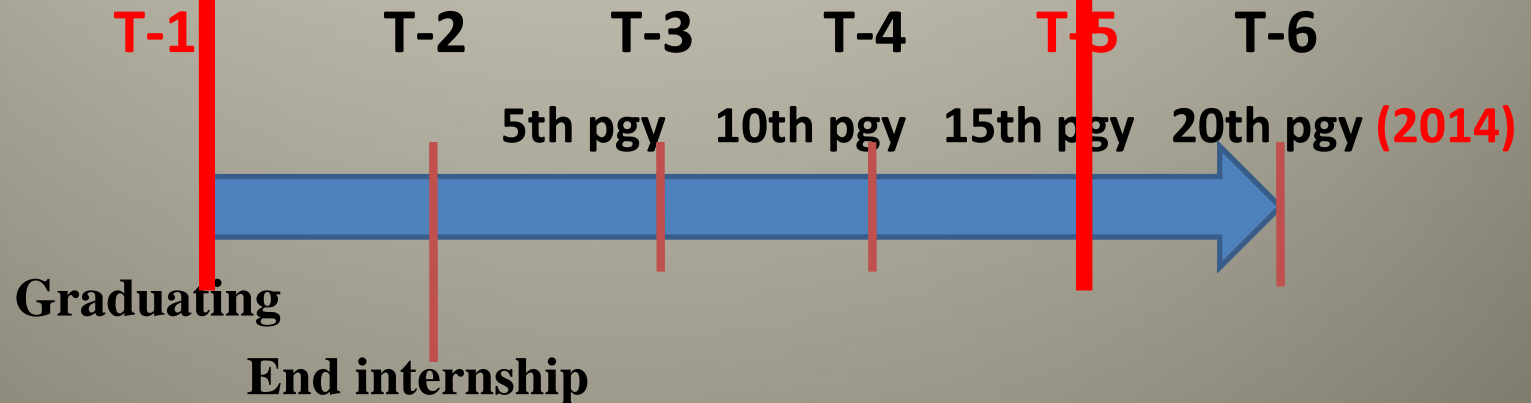
The two NORDOC cohorts

13

Student cohort (NORDOC I)



Young doctor cohort (Nordoc II)



Methods

14

- **Mailed questionnaire at medical school termination and consecutively every fifth year.**
- **Content (a.o.):**
- **Perceived medical school stress - 13 items** (Vitaliano, 1984)
- **Job stress - 43 items** (Cooper, 1989)
- **Burnout - emotional exhaustion**
(22 items) - **depersonalization**
- **reduced personal accomplishment** (Maslach, 1996)
- **Items on: Job satisfaction**
Well-being
Perceived skills

Methods (cont.)

15

- **Response rates:**

Generally 60-70%

At 15/20-year follow-up (2014), 562/978 (57.4%).

- **Data collection completed, therefore, results can deviate slightly from submitted abstract.**

Results - (cross-sectional)

16

At the end of medical school:

- **25.5%** had **often/once in a while** regretted their choice of medicine

- **21.7%** **once in a while**

- **3.8%** **often**

- **Regretting - higher scores on:**

Once in a while Often

- **Neuroticism** **F = 30.84** **F = 8.18**, $p < .001$ (scale 1-9)

- **Perceived stress** **F = 59.12** **F = 69.79**, $p < .001$ (1- 5)

(contr. for Neuroticism)

Results - (cross-sectional)

17

- Gender differences:
- Regretting **once in a while**:
 - **Female** doctors vs. male, 23.4% vs. 19.5%, $X^2 = 1.91$, n.s.
- Regretting **often**:
 - **Female** doctors vs. males, 5.2% vs. 2.1%, $X^2 = 5.71$, $p = .021$
- No age gradient
- No effect from:
 - Having children (or not)
 - Ethnicity

Results (cont.) - longitudinally

18

- **15/20 years** after graduation - regretting:
 - **22.4%** (25.5%) often/once in a while
 - **19.8%** (21.7%) once in a while
 - **2.6%** (3.8%) often

Results (cont.) longitudinally

19

Those regretting **often/once in a while** at medical school termination had **15 years later higher** levels of:

• **Job stress** - 1.91 vs. 1.81, **F = 4.44**, $p = .036$

(scale 1-5)

• **Burnout** - 2.64 vs. 2.42, **F = 30.04**, $p < .001$ *

(scale 1-5)

• **Psycholog. distress** - 0.64 vs. 0.34, **F = 27.92**, $p < .001$ *

(scale 1-5)

* Controlled for level of Neuroticism

Used alcohol more often to cope with life situation, 41.4% vs. 21.7, **X² = 5.37**, $p = .029$

Results (cont.) longitudinally

20

- Those regretting **often/once in a while** at medical school termination had **15 years later lower** levels of:
 - **Job satisfaction** - 4.03 vs. 4.33, **F = 10.05**, $p = .002$
(scale 1-7)
 - **Self-reported skills** - 4.97 vs. 5.17, **F = 6.52**, $p = .011$
(scale 1-7)
 - **Well-being as doctor** - 4.64 vs. 5.51, **F = 39.30**, $p < .001$
(scale 1-7)

Results (cont.) longitudinally

Is regretting over time **stable**?

Among those regretting often/once in a while at end of medical school (T-1),

53% regretted often/once in a while 15 yrs. later (T-6)

Among those never regretting T-1,

88% had never regretted (T-6)

Results (cont.) cross-sectional at T-6

Was proportions of those regretting often/once
in a while different across positions:

64% working in hospitals

17% working as Gps or specialist practice

Conclusions

Results indicate:

- Regretting at the end of medical school can be **a risk factor** for later distress/dissatisfaction as a doctor
- Neuroticism do not alone explain why those regretting **are more burdend**
- Situational factors should be explored, personality factors should be councelled

Thank you for your attention!!