

# Current and future health care needs of future hospital physicians

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# Background

- Hospital physicians experience negative work-related health effects.
  - Physical complaints in neck, lower back or arm (Ruitenburg et al., 2013; Johnston et al., 2005, Sari et al., 2005)
  - Psychological complaints as burnout, stress or depression (Ruitenburg et al., 2012; Gaba & Howard, 2002)
- These negatively affect work ability and may reduce quality of care and put patient's safety at risk. (Ruitenburg et al., 2012; Gaba & Howard, 2002)
- However, most keep on working!



# Background (2)

Good quality of care in the future?



Focus on health status and occupational care needs of future hospital physicians.



# Background (3)

- Medical students experience negative health complaints: depression (35-41%), anxiety (28-32%) or stress (18-22%) (Gaspersz et al., 2012; Compton et al., 2008)
- Worker's Health Surveillance (WHS) is a preventive strategy in OH to guide work-related health.
- Do medical students actually worry about their health and do they feel the need of care regarding their complaints?
- If so, how would they prefer to receive future occupational care?



# Research questions

1. Do future hospital physicians worry about their current health?
2. What are the current and future health care needs of future hospital physicians?
3. Are worries about their current health related to anticipating future care needs?
4. What are the preferred ways in which future hospital physicians would like to receive advice and support?



# Method

- Cross-sectional study (data used of the 3<sup>rd</sup> wave of cohort study)
- 3<sup>rd</sup> wave: 892 subjects invited to fill out an electronic survey
- Educational program: 4 years theoretical education, 2 years internship
- Three groups of study subjects:
  - Medical students (studying in their 3<sup>rd</sup> or 4<sup>th</sup> year)
  - Students clinically active (studying in their 5<sup>th</sup> or 6<sup>th</sup> year)
  - Graduated hospital physician (recently graduated, now hospital physician)



# Method (2)

Q1: Do future hospital physicians worry about their current health?

- ‘To what extent do you worry about your current health?’  
Score: 0 – 100 (0 = not at all / 100 = a lot)

- 3 groups were composed:

Few worries (score 0-33)

Some worries (score 34-67)

A lot of worries (score 68-100)



- % and frequency reported for groups



# Method (3)

Q2: What are the current and future health care needs of future hospital physicians?

- Current health care needs

‘Do you feel the need for counselling, coaching or treatment because of your own psychological or physical complaints?’ (yes / no)

- Future health care needs

‘Would you consider taking a job-specific WHS if this was offered by your employer?’ (yes / no / that depends) + explanation

- % and frequency reported





# Method (4)

Q3: Are worries about their current health related to anticipating future care needs?

- Bivariate correlation
  - Worries about current health (3 groups)
  - Future care needs (WHS yes or no)
- Tested for significance using Kendall's Tau-Beta



"My doctor told me to avoid any unnecessary stress, so I didn't open his bill."



# Method (5)

Q4: What are the preferred ways in which future hospital physicians would like to receive advice and support around a WHS?

‘How and where would you like to receive feedback on your results?’

- Online
- By e-mail
- By an occupational physician
- By a medical specialist
- Other...

% and frequency reported

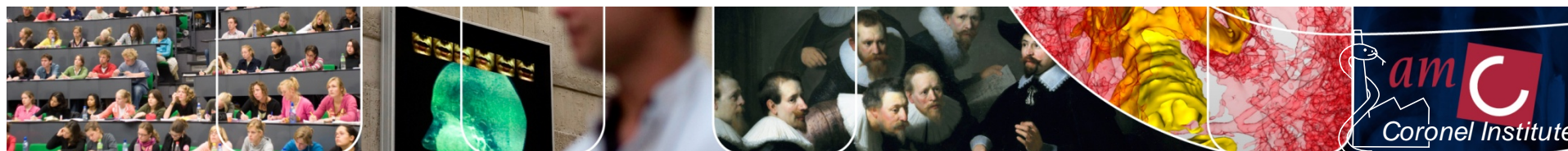
‘Where would you like the interventions to take place?’

- Own teaching hospital
- Another hospital
- Separate clinic
- By internet
- By e-mail
- By phone
- At a professional’s home
- Other...



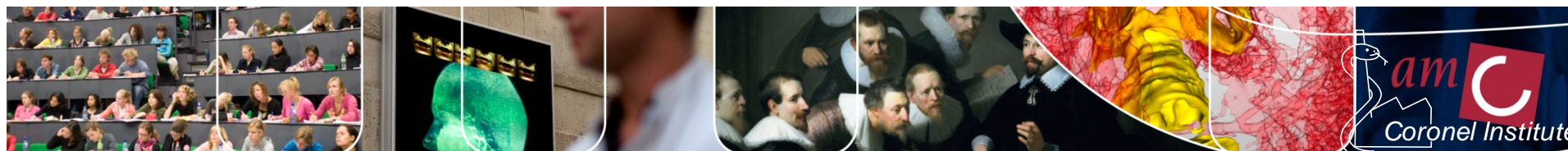
# Results – Worry about current health

	Medical student (n=301)		Clinically active student (n=253)		Graduated hospital physician (n=76)		Total (n=647)	
	n	(%)	n	(%)	n	(%)	n	(%)
Few worries	192	(69)	176	(75)	58	(81)	426	(73)
Some worries	62	(22)	45	(19)	11	(15)	118	(20)
A lot of worries	25	(9)	13	(6)	3	(4)	41	(7)



# Results – Current and future health care needs

	Medical student (n=298)		Clinically active student (n=247-251)		Graduated hospital physician (n=76)		Total (n=621-625)	
<b>Current care needs</b>	n	(%)	n	(%)	n	(%)	n	(%)
Psychological complaints	132	(44)	106	(42)	26	(34)	264	(42)
Physical complaints	142	(48)	87	(35)	19	(25)	248	(40)
<b>Future care needs</b>								
WHS: yes	169	(57)	123	(50)	32	(42)	326	(52)
WHS: no	30	(10)	28	(11)	13	(17)	73	(12)



# Results – Current and future health care needs

Expected contribution of WHS to:

- own and patient safety
- to quality of their own work
- to improving or maintaining good health

Explanations of no WHS:

- Health status is own responsibility
- Only necessary when already having complaints
- Concerns regarding consequences for employment



## Results – Association worries about current health and future care needs

	WHS: yes		WHS: no	
	n	(%)	n	(%)
Few worries (n=266)	219	(82)	47	(18)
Some worries (n=81)	69	(85)	12	(15)
A lot of worries (n=32)	25	(78)	7	(22)

No significant association ( $\tau = .06$ ,  $p > 0.05$ )



# Results – Preferred ways of feedback

	Medical student (n=279)		Clinically active student (n=234)		Graduated hospital physician (n=72)		Total (n=585)	
Mode of feedback	n	(%)	n	(%)	n	(%)	n	(%)
Online	75	(25)	69	(28)	25	(33)	169	(27)
By e-mail	<b>163</b>	<b>(55)</b>	<b>128</b>	<b>(52)</b>	<b>42</b>	<b>(55)</b>	<b>333</b>	<b>(54)</b>
By phone	47	(16)	40	(16)	9	(12)	96	(16)
OP	<b>151</b>	<b>(51)</b>	<b>117</b>	<b>(47)</b>	<b>49</b>	<b>(65)</b>	<b>317</b>	<b>(51)</b>
MS	88	(30)	57	(23)	24	(24)	169	(27)



# Results – Preferred ways of guidance

Guidance by/at	Medical student (n=279)		Clinically active student (n=234)		Graduated hospital physician (n=72)		Total (n=585)	
	n	(%)	n	(%)	n	(%)	n	(%)
<b>Own hospital</b>	<b>220</b>	<b>(74)</b>	<b>153</b>	<b>(62)</b>	<b>51</b>	<b>(67)</b>	<b>424</b>	<b>(68)</b>
Other hospital	71	(24)	65	(26)	13	(17)	149	(24)
Separate clinic	47	(16)	30	(12)	11	(15)	88	(14)
Internet	83	(28)	58	(24)	19	(25)	160	(26)
E-mail	79	(27)	53	(22)	20	(26)	152	(25)
Phone	40	(13)	31	(13)	10	(13)	81	(13)
<b>Professional's home</b>	<b>94</b>	<b>(32)</b>	<b>88</b>	<b>(36)</b>	<b>28</b>	<b>(37)</b>	<b>210</b>	<b>(34)</b>





# Conclusions

- A small proportion (4%-9%) worries a lot about their current health, while the majority (69-81%) has a few worries.
- 25% - 48% indicated needing care for current psychological or physical problems; more than half of the participants (52%) anticipates future care needs by indicating they would follow a WHS when offered.
- No significant association between worries about current health and anticipating future care needs. Despite having few worries about their current health, the majority anticipated future care needs.
- Hospital physicians do not have one specific preference in the way or the location feedback or guidance of the results is given.



# Interpretation

- Clear need for prevention and treatment of work-related health complaints among future hospital physicians.
- A job-specific WHS as a preventive measure is valued and will be used by the majority of young hospital physicians.
- Education and information is important to address the potential negative effects of impaired health.
- Issues of confidentiality do not seem to be an issue in our population.



# Questions?

