

Impact of an interdisciplinary master program in evidence based practice

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Background

- Over time Norwegian policies related to higher health and social care education have increasingly focused on evidence-based practice (EBP) (1-3)
- In 2008, an interdisciplinary master program that specifically targeted EBP was started at the Western Norway University of Applied Sciences (4)
- > At the time, the program was unique in Scandinavia
- > To our knowledge, the number of such programs is still limited, and research evaluating such programs scarce

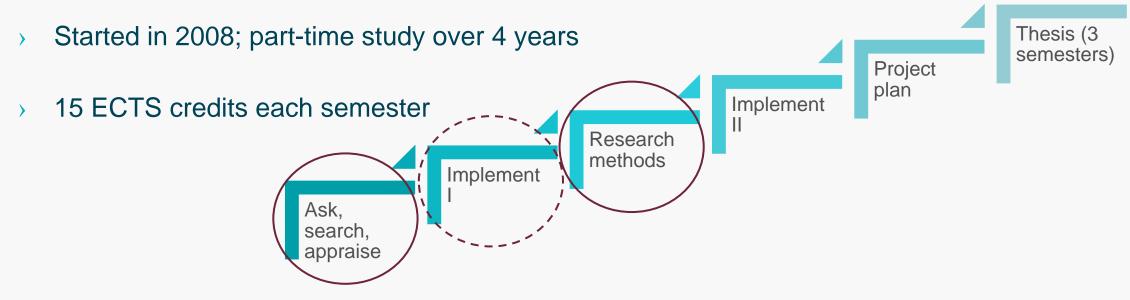
- 2) Helse-og omsorgsdepartementet. [Health&Care21 Strategy]; 2014.
- 3) Lovdata. [Regulations of Common Curricula for the Health and Social Care Educations]; 2017.
- 4) https://www.hvl.no/en/studies-at-hvl/study-programmes/2019h/ma-kbp4/

¹⁾ Meld. St. 13 (2011–2012) [Education for Welfare: Interaction as Key];2012.

- > Evaluate the impact of an interdisciplinary master program in EBP in the health sciences
 - > on student's beliefs about the value of evidence-based practice and their ability to implement evidence-based practice, and
 - > on the extent to which students implement evidence-based practice



> Master program in evidence-based practice in the health sciences



- > Changes over time in learning strategies
 - > Modifications following evaluation by students and teachers
 - > Towards technology assisted learning (blended learning)

Methods

- > Outcome measures were the Evidence-Based Practice Scales by Melnyk et al. (2008)
 - The Evidence-Based Practice Beliefs scale allows measurement of a person's beliefs about the value of EBP and the ability to implement it
 - > 16 items, sum scores range from 16 to 80
 - The Evidence-Based Practice Implementation scale allows measurement of the extent to which EBP is implemented
 - > 18 items, sum scores range from 0 to 72
- > Statistical analyses were based on sum scores transformed to a 0 to 100 scale
- Generalized estimating equations regression was used to estimate longitudinal changes in outcome measures throughout the study program

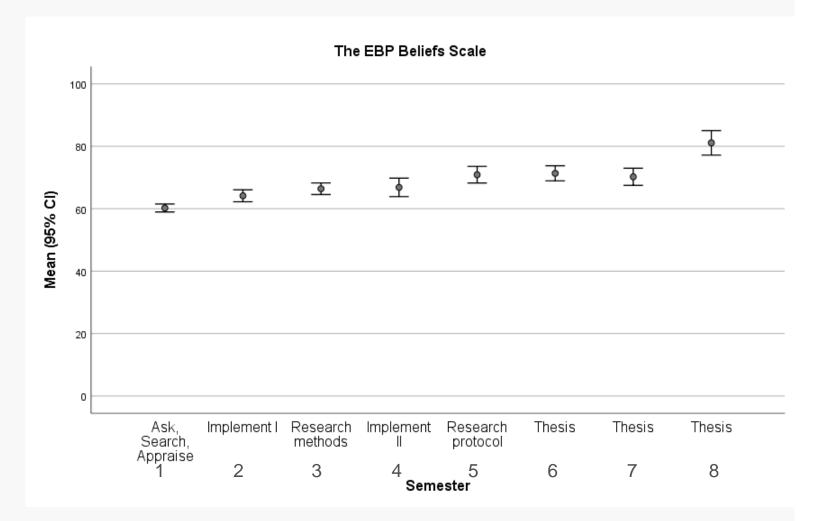
Results – Baseline demographics

- Among 166 eligible students,160
 gave consent to participate
- > 6 student cohorts
- Median number of students per cohort was 29 (range 21 to 33)

Variable	%	Mean (range)
Females	86	
Age		41 (25 – 58)
Occupation Nurse Social educator Physical/occupational therapist Librarian Other	63 12 12 5 8	
Working full time	53	
Years working		14 (0 – 34)
Working for 10 years or longer	68	

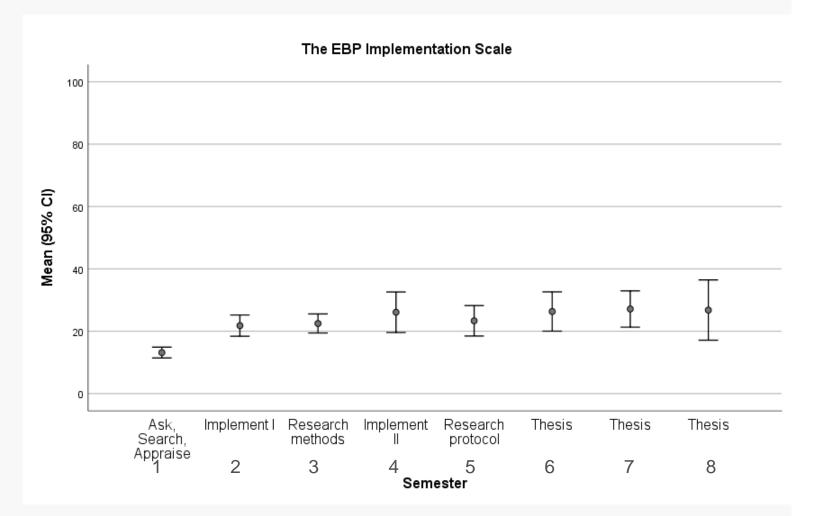
Results - The EBP Beliefs Scale

- Mean score at baseline was 60 (SD 8.8)
- Linear increase in mean score was 2.1 units (95% CI 1.7 to 2.5) per semester
- Comparing values at baseline and at the end of the study program, the mean difference was 16 units (95% CI 12-20)

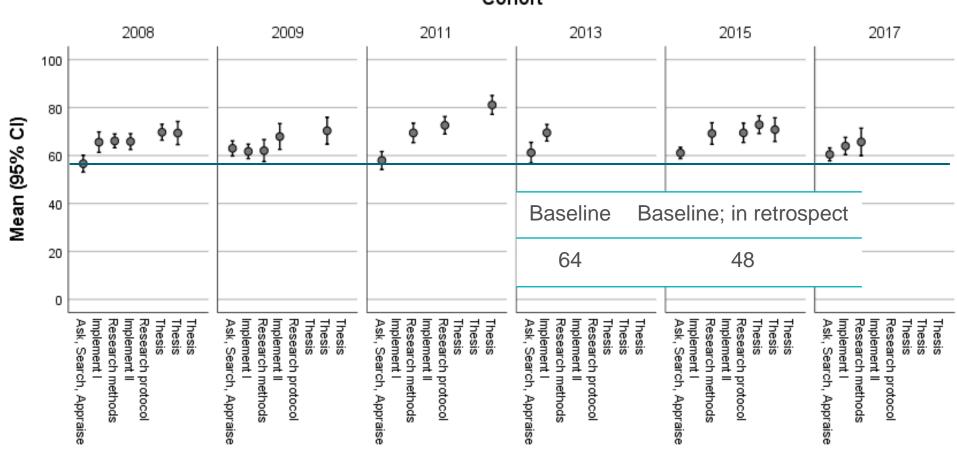


Results - The EBP Implementation Scale

- Mean score at baseline was 13 (SD 12)
- Linear increase in mean score was 1.3 units (95% CI 0.2 to 2.5) per semester
- Comparing values at baseline and at the end of the study program, the mean difference was 10 units (95% CI 4.2-16)

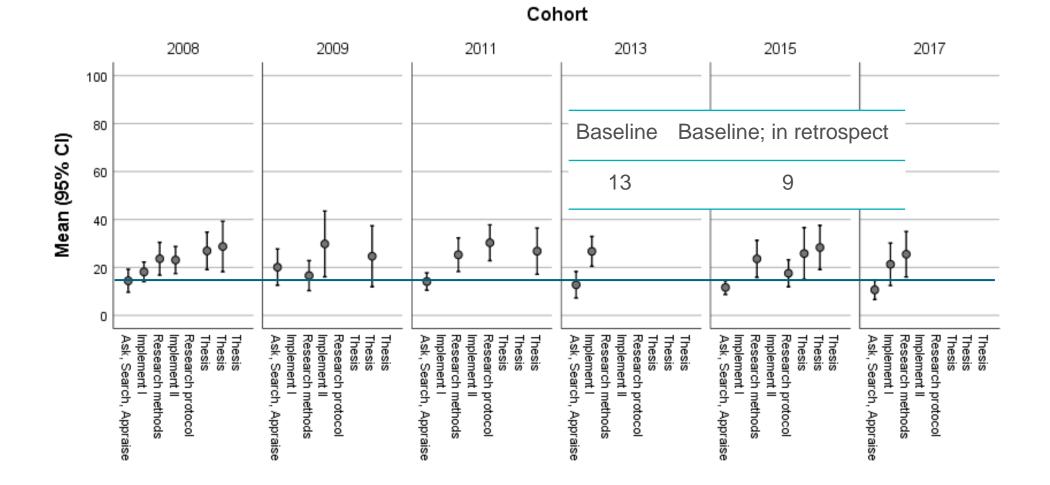


Results - The EBP Beliefs Scale



Cohort

Results - The EBP Implementation Scale



Limits

> Self-reported outcome measures

- While the original EBP Beliefs and EBP Implementation scales have been described with acceptable reliability and validity properties (Melnyk et al. 2008), the Norwegian versions have not been fully validated
- To our knowledge, there is limited evidence of what should be considered high or low EBPB and EBPI scores, and also of what defines a minimal clinical important difference
- > The accuracy of the baseline statistics may be questionable

Bottom line

- > Student's beliefs about the value of evidence-based practice and of their ability to implement it, increased throughout the study program
- > The extent that students implemented evidence-based practice also increased throughout the study program
- > Implementation scores were, however, consistently lower than beliefs scores