

INTRODUCTION

- Pallium Canada, established in 2000, is a national not-for-profit program that builds primary-level palliative care capacity, mainly through its interprofessional Learning Essential Approaches to Palliative Care (LEAP) courseware.
- There are various versions of the LEAP courses to address different health care sectors and disease groups. LEAP Core is a 2-day course with 12 modules that targets community-based primary health care health professionals. The courses are mainly classroom-based and use an interactive, case-based, modular approach. Attendance is limited to a maximum of 25 learners per session.
- A facilitator training program (currently 640 facilitators across Canada) and an online learning management system (Pallium Central) support course delivery.
- From April 2015 to March 2017, 485 LEAP courses were held across Canada.

STUDY GOALS

- Study the impact of the LEAP Core course on learners' knowledge, attitudes and comfort levels pre- versus post-course;
- Explore the commitments-to-change (CTC) made by learners post-course 4 months post-course (results reported elsewhere)
- Assess the learners' experiences with the courses (results briefly report here).

METHODS

- Retrospective, mixed methods study.
- Outcome measures (same instruments administered pre- and post-course):
 - Pallium Knowledge Quiz (20 item MCQ-multiple choice questionnaire)
 - Pallium Attitudes Survey (24 item- Likert Scale)
 - Pallium Comfort Scale (16 item- Likert scale)
 - Course Evaluation Survey and Commitment-to-Change (CTC) (post-course).
 - Instruments assess various aspects of providing the palliative care approach and have been designed specifically for Pallium Canada using best practices in instrument development
- Analysis methods
 - Total scores used for analyses. Knowledge Quiz data (MCQ) treated as dichotomous data (correct or incorrect) and total percentage score calculated. Likert scales data treated as interval data. Pre- versus Post-course scores compared using paired samples t-tests. Significance level (Alpha) set at 5% (two-tailed) for all tests. Effect sizes (Cohen's d) calculated. Instrument internal consistency (Cronbach's α) analyzed.
 - SPSS used for analyses.
- All learners who participated in LEAP Cores from April 2015 to March 2017 (2 fiscal years) included. Learners divided into five profession groups: physicians (MDs); nurses (RNs); pharmacists (Phs); social workers (SWs); and others.
- The study was approved by the Conjoint Health Research Ethics Board (CHREB) of the University of Calgary (REB 17-0429).

RESULTS

- 244 sessions delivered during study period, with a total of 4637 learners:
 - RNs 2990 (64.5%); MDs 878 (18.9 %); SWs 127 (2.7%), Phs 100 (2.2%) and "Others" 541 (11.7%); including dietitians, therapists and leaders).
- Response rates varied across tools and professions. Highest amongsts physicians and nurses.

Instruments	Response Rates (ranges across professions)		
	Pre-Course	Post-Course	4-months Post course
Knowledge Quiz, Attitudes Survey, Comfort Survey	80% - 92%	53.7% - 59.6%	
Course Evaluation*		44.5%-74%	
Commitment-to-Change (CTC)*		Statements 39.4%-66%	Reflections 21.4%-26%

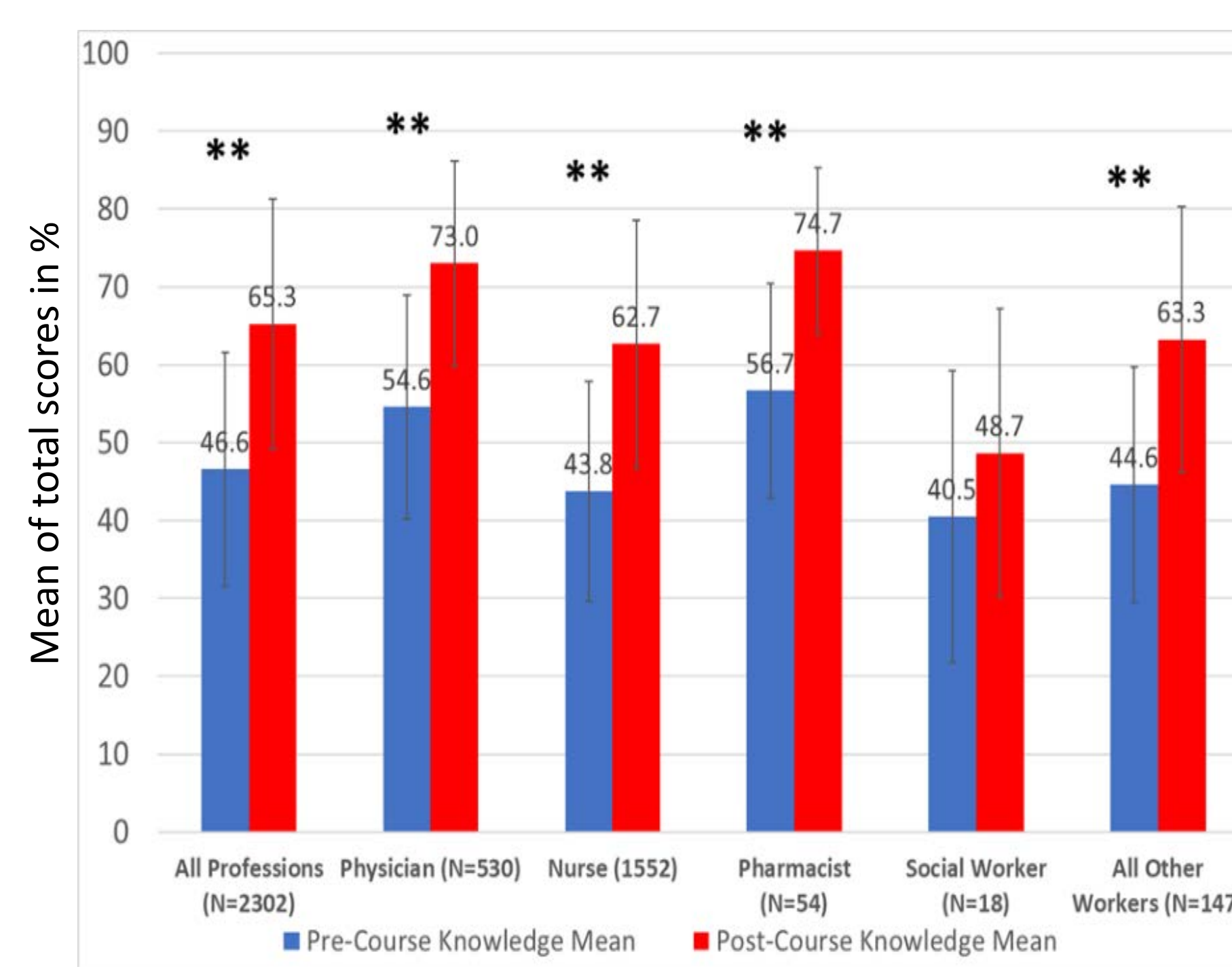
*Not reported in this abstract

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Knowledge

Figure 1: LEAP Core Knowledge Palliative Care Quiz: Pre- versus post-course mean scores and standard deviations across professions (Paired samples).

**p<0.05. (Scores denote % of items scored correctly in questionnaire)

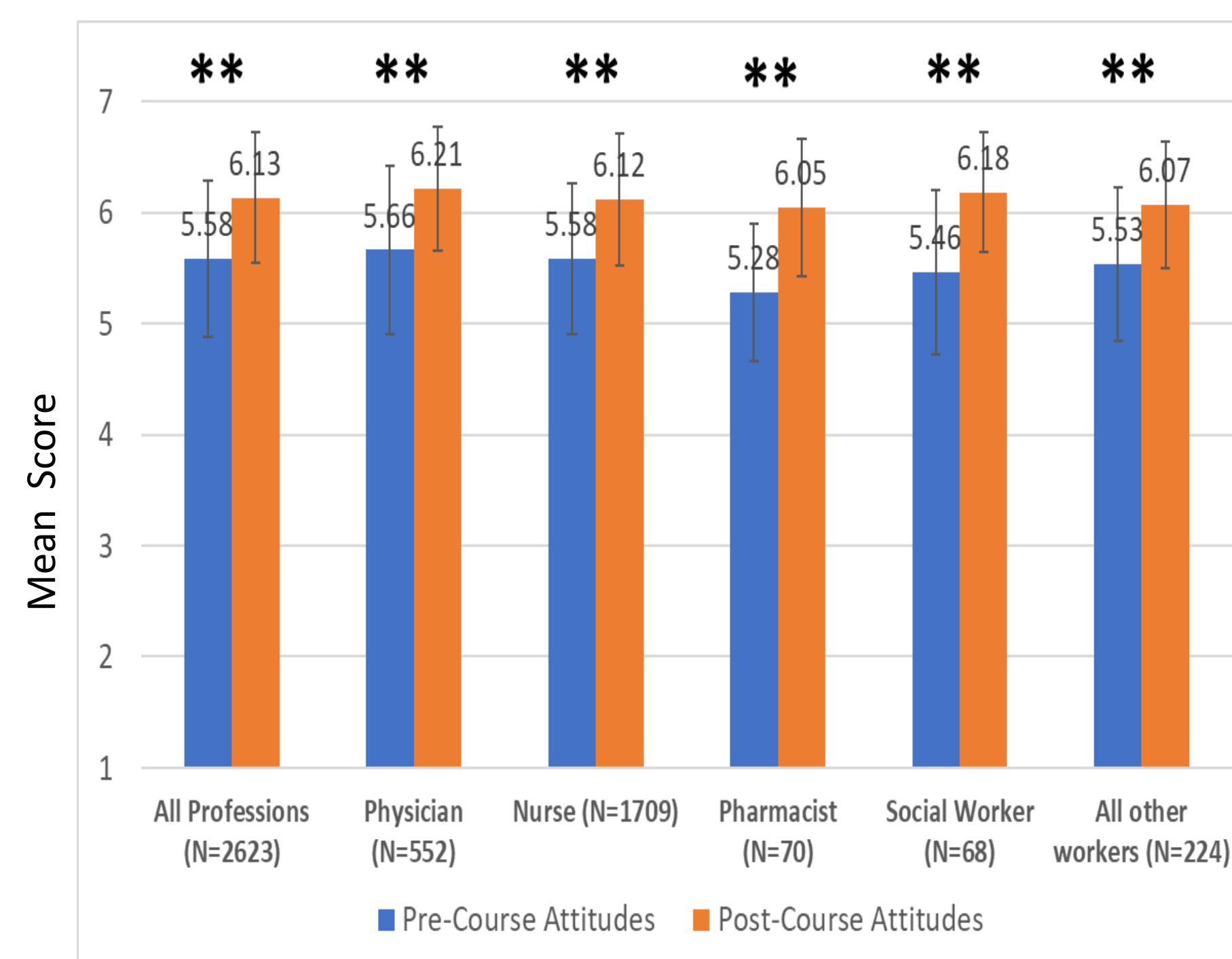


Significant improvements observed for all professions together (t=-55.84, df=2301; p<0.001), with large effect size (d 1.16) as well as for MDs (t=-28.72, df=529; p<0.001; d=1.25), RNs (t=-44.77, df=1551; p<0.001; d=1.14) and Phs (t=-8.45, df=53; p<0.001). Cronbach's α 0.68 for all professions together and 0.60 and 0.66 for MDs and RNs respectively.

Attitudes

Figure 2: LEAP Core Attitudes to Palliative Care Survey: Pre- versus post-course mean scores and standard deviations across professions (Paired samples).

**p<0.05 (1=Totally Disagree, 7=Totally Agree. Higher scores more favourable).

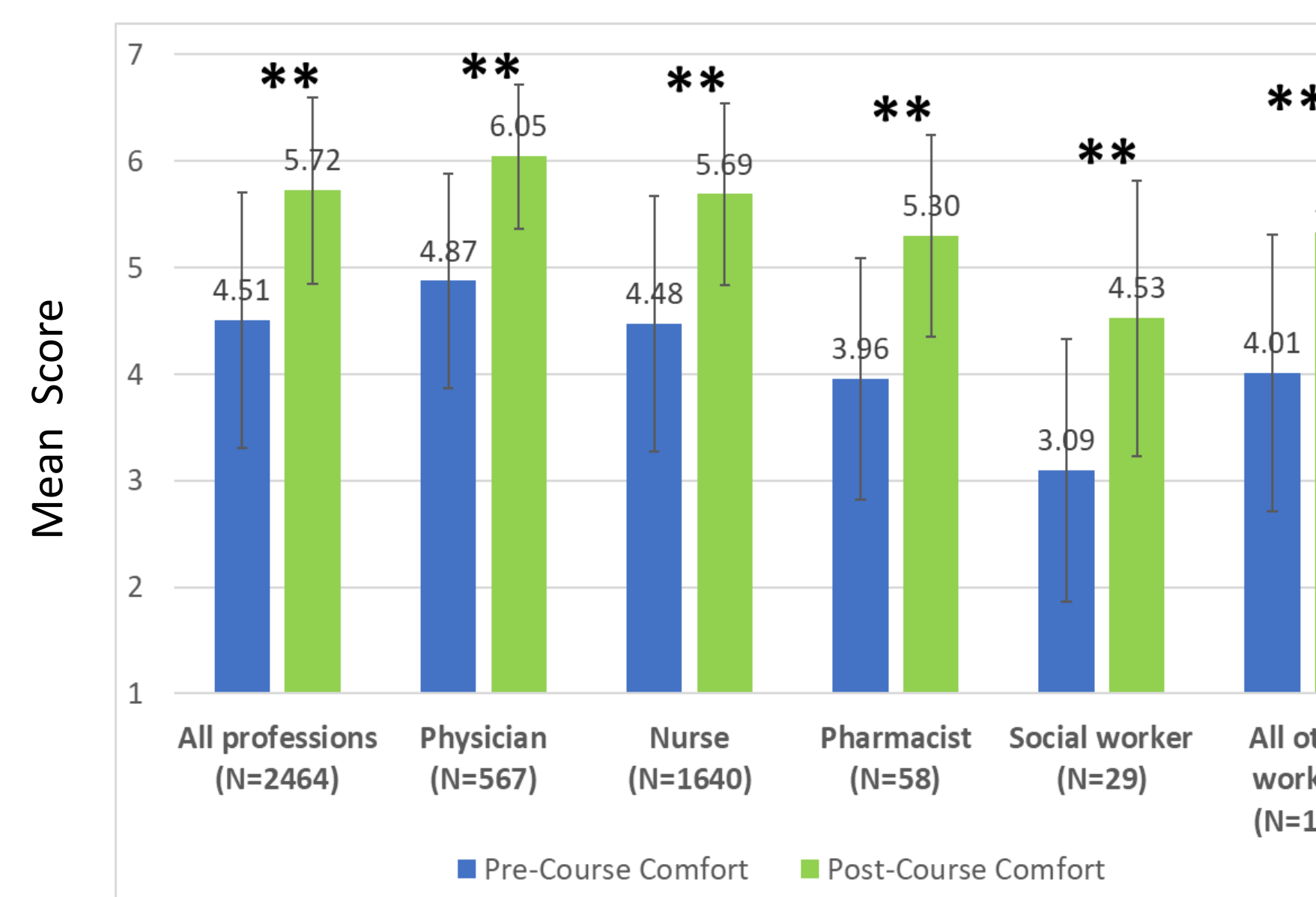


Significant improvements and medium to large effect sizes observed for each of the profession groups; MDs (t=-19.21, df=551, p<0.001, d=0.82); RNs (t=-32.20, df=1708, p<0.001, d=0.78), SWs (t=-8.64, df=67, p<0.001, d=1.05) and for "other professionals" (t=-12.59, df=223, p<0.001, d=0.84). Cronbach's α 0.70 on average for physicians and nurses.

Comfort

Figure 3: LEAP Core Comfort with Palliative Care Survey: Pre- versus post-course mean scores and standard deviations across professions (Paired samples)

**p<0.05 (1=Very Uncomfortable, 7=Very Comfortable. Higher scores more favourable).



Significant increases and large effect sizes found for each profession; MDs (t=-31.96, df=566, p<0.001, d=1.34); RNs (t=-47.72, df=1639, p<0.001, d=1.18), SWs (t=-6.25, df=28, p<0.001, d=1.16), Phs (t=-11.43, df=57, p<0.001, d=1.50), and "others" (t=-16.91, df=169, p<0.001, d=1.30). Cronbach's α 0.79-0.95.

CONCLUSIONS

- Significant pre- versus post-course improvements in the different competency domains were noted across the courses and across the different profession groups for this large group of learners. These were often accompanied by large or medium effect sizes. This is very encouraging, particularly given the interprofessional nature of the course.
- Study limitations include the self-reporting nature of "comfort".
- There is also emerging evidence for direct impact on patient care (see complementary poster by Pallium: "Do Learners Implement what they Learn?")