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### **Basic Reporting**

The study "Evaluation of the effect of a communication skills course on medical students' attitude towards patient-centered care" investigates the impact of targeted communication training on medical students' attitudes. Conducted at Taibah University in Saudi Arabia, this prospective observational study provides valuable insights into how structured courses influence the patient-practitioner dynamic, particularly in the context of patient-centered care. The Patient Practitioner Orientation Scale (PPOS) was used before and after the course to evaluate changes in attitudes.

## **Experimental Design**

The study employed a prospective observational design with a repeated-measures approach, assessing the same cohort of medical students at two points in their education: the beginning of year two and the beginning of year four. This longitudinal perspective offers insights into the course's long-term impact. The "Patient Practitioner Orientation Scale" (PPOS) was used to measure students' attitudes toward patient-centered care. The scale consists of two subscales:

- **Sharing** (more managerial): Evaluates how much a physician shares information, power, and control with the patient.
- **Caring** (empathy-based): Measures how much a physician considers the patient's preferences, feelings, and expectations.

Both subscales were appropriate for gauging the comprehensive impact of communication skills training. Statistical analysis involved calculating mean scores for each subscale out of 6 and using an independent sample T-test to compare the mean scores between the two time points. The response rates were high in both years: 93.5% in year two and 89.5% in year four.

## Validity of the Findings

The study found a significant improvement in the "sharing" subscale but a decline in the "caring" subscale, suggesting that students appreciated the importance of shared decision-making and collaboration in medical consultations post-training. However, the decline in the "caring" subscale, which relates to empathy and patient understanding, raises questions about the emotional engagement fostered by the course. It is understandable that learning processes and procedures can be easier than learning empathy. These findings imply that while students recognize the value of information exchange and patient autonomy, further focus is needed to nurture empathetic engagement.

The study used the validated PPOS tool to measure attitudes toward patient-centered care, supporting the accuracy of the measurements. The distinction between the "sharing" and "caring" subscales allows for a nuanced understanding of changes in attitudes. However, the reliance on self-reported measures using the PPOS could introduce bias, as students might answer in socially desirable ways (social desirability bias).

# **Internal Validity**

The use of a prospective observational study design with repeated measures strengthens the internal validity, as the same cohort of students was assessed at two different points in time.

## **External Validity**

The study was conducted at a single institution (Taibah University in Saudi Arabia), which may limit the generalizability of the findings to other medical schools or cultural contexts. The cultural and educational environment might uniquely influence attitudes toward patient-centered care. However, the high response rates in both year two and year four enhance the representativeness of the sample within this specific setting. The study appropriately identified statistically significant changes in the "sharing" subscale and a significant decline in the "caring" subscale. Nonetheless, the overall scoring showed no significant progress (p = 0.282), suggesting a nuanced interpretation of the course's effects. Follow-up studies with students after graduation would help explore whether these changes are sustained in clinical practice.

### **Additional Comments**

The study reveals gender differences, with female students demonstrating more progress compared to male students. However, without detailed subgroup analyses, it is unclear how robust this finding is. While the findings are insightful, further investigation is needed to understand the reasons behind the decline in the "caring" subscale. Exploring how factors such as cultural or educational background contribute to these gender differences could also provide valuable insights. Moreover, alternative teaching methodologies might be more effective in nurturing empathy.

The study contributes significantly to ongoing discussions about enhancing patient-centered approaches in medical practice. However, reliance solely on the PPOS scale might not capture all dimensions of patient-centered care. Including qualitative assessments or additional tools could provide a more holistic understanding of students' attitudes.

### Conclusion

While the course positively impacted the "sharing" subscale, it did not improve the "caring" subscale. This indicates a gap in the curriculum, highlighting the need for comprehensive training that addresses both the cognitive (sharing) and emotional (caring) aspects of patient-centered care. To address this gap, the curriculum could incorporate more patient interaction, reflective practice, and empathy training to nurture a more holistic patient-centered attitude among students. Future research should investigate factors contributing to the decline in the "caring" subscale and consider longitudinal studies that follow students into their clinical practice years to assess the real-world impact of communication skills training.

In summary, while the study provides valuable insights into the effectiveness of a communication skills course, it also highlights areas for curriculum enhancement. Further research is necessary to explore the long-term effects of such training and identify strategies to effectively address both the "sharing" and "caring" components of patient-centered care.