

CONFERENCE ABSTRACT

Improving the quality of care and medical education by involving medical students in providing patient education: a scoping review

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Thomas Willem Vijn¹, Cornelia R.M.G. Fluit², Jan A.M. Kremer¹, Marjan J. Faber¹, Hub Wollersheim¹

1: Radboud university medical center, Radboud Institute for Health Sciences, Scientific Institute for Quality of Healthcare, Nijmegen, the Netherlands;

2: Radboud university medical center, Radboudumc Health Academy, Department for Research in Learning and Education, Nijmegen, the Netherlands

Introduction: Studies suggest that quality of care and medical education is increased in student provided patient education. Interventions and outcomes in this field, however, have not yet been systematically reviewed. The authors examined the scientific literature for studies on interventions and outcomes of student provided patient education in a scoping review.

Methods: Four databases (MEDLINE, Embase, ERIC, PsycINFO) were searched for studies reporting patient education, undergraduate medical students, and patient-centered outcomes of patient education (patient satisfaction, self-care, health literacy, treatment compliance, health attitude, health behavior, patient empowerment, students' communication skills, shared decision-making, and relations between (upcoming) care professionals and patients), published between January 1990 and October 2015. Study quality was assessed using the Quality Assessment Tool for Quantitative Studies of the Effective Public Health Practice Project (1). Facilitators and barriers to educational interventions were assessed using the Learning Transfer System Inventory (2). The learning yield, impact on quality of care, and practical feasibility of the interventions were rated by patients, care professionals, researchers, and education professionals based on their personal expertise and rating guidelines.

Results: The search resulted in 4,991 hits. Eighteen studies were included in the final synthesis. Study quality was rated weak or moderate. Student provided patient education improved patients' health knowledge (seven studies), attitude (one study) and behavior (three studies), and enhanced disease management (three studies), medication adherence (one study) and shared decision-making (one study). In addition, involving students in patient education enhanced students' patient education self-efficacy (four studies) and skills (three studies), relations with patients (two studies), and communication skills (two studies). Experts rated student provided courses, student-run patient education clinics, student provided outreach

programs, student health coaching, and clerkships on patient education with high learning yield and high impact on quality of care.

Discussion/conclusions/lessons learned: Student provided patient education improves quality of care and medical education. Medical curricula should contain student-run patient education clinics, student provided outreach programs, student health coaching, and/or clerkships on patient education to enhance the quality of care and medical education. In addition, mature roles for students, training preparation, constructive supervision, peer support on organizational and individual levels, and learning aids should be taken into account when implementing student provided patient education to enhance learning effectiveness.

Limitations: The search strategy of our review did not include health status as an outcome, because it's a debatable outcome of patient education interventions. However, as our review shows that disease management is enhanced when patient education is provided by undergraduate medical students, other studies which were not included in this review may show that health status is improved as well in student provided patient education. In addition, we only searched the scientific literature, therefore, examples of integrating patient education and medical education as reported in the grey literature are not described in this review.

Suggestions for future research: Future research should be aimed at further investigating the effects found in this study with high-level evidence.

References:

- 1- Hamilton O. Quality Assessment Tool For Quantitative Studies. Available from: <http://www.ephpp.ca/index.html>: Effective Public Health Practice Project; 1998.
- 2- Holton E, Bates, RA, Ruona, WEA. Development of a generalized learning transfer system inventory. Hum Resour Dev Q. 2000;11(4):333-60.

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