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Review Article

A meta-narrative review of recorded patient–pharmacist interactions: Exploring biomedical or patient-centered communication?

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Abstract

Background: Pharmacists worldwide require improved patient-centered communication skills as they transition from a dispensing role to enhanced involvement in patient care. Researchers have studied pharmacist communication through audio and video recordings of patient–pharmacist encounters. A meta-narrative review of research using these recordings will offer insight into the extent of biomedical vs. patient-centered communication in patient–pharmacist exchanges.
Objectives: This review aimed to characterize research on patient–pharmacists interactions using audio or video recordings and explore the 1) focus of research questions, 2) study design, 3) data analysis methods, 4) main findings and 5) presence of patient-centered vs. biomedical models of interaction.
Methods: Drawing on the principles of meta-narrative systematic review, a literature search was performed to identify studies published in English. No publication date limits were implemented. Key search terms included: "audio recording", "video recording", "communication", "patient counseling", "patient interaction", "discourse analysis", "conversation analysis", "narrative analysis", and "content analysis". The search was conducted in five databases: Medline, Embase, International Pharmaceutical Abstracts (IPA), Web of Science, and Academic Search Complete.
Results: Forty-one articles met the inclusion criteria and represent 32 unique collections of patient–pharmacist recordings. The 23 quantitative studies focused on "what" was in the interaction, whereas the 5 qualitative studies characterized specialized pharmacy practice and 13 studies used conversational analysis to describe "how" patients and pharmacists interact. The majority of research described the content of recorded interactions in community pharmacies. Twenty-three studies presented evidence of a biomedical model, whereas 8 studies characterized a patient-centered focus.
Conclusions: A developing body of research used recordings to describe the content of patient–pharmacist communication and explore the quality of the interactions, validation of coding tools, impact of an intervention, and patient–pharmacist power asymmetry. Study findings, particularly the identification of

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biomedical vs. patient-centered communication, were guided by the quantitative, qualitative, or conversational analysis research paradigm.

Keywords: Audio recordings; Video recordings; Patient centered care; Patient–pharmacist interactions; Biomedical

Introduction

Evidence demonstrates that pharmacists' care enhances patient health.[1] Pharmacy practice worldwide is evolving from dispensing and educating patients to providing patient-centered care where pharmacists assess the appropriateness of medication therapy, ensure patients have an understanding of their drug therapy, encourage adherence to medications, and monitor patient outcomes.[2] In the pharmacy literature, patient–pharmacist communication has been conceptualized as a transmission action or a transaction.[3] Transmission is a one-way process from sender to receiver. Biomedical communication usually follows a transmission model where the pharmacist concentrates mainly on providing medication-related information. The transaction model is a two-way process, where shared meaning is negotiated between two participants such as in patient-centered communication where the pharmacist identifies and responds to patients' ideas and emotions regarding their illness.[3]

The main difference between the patient-centered and biomedical models is the level of patient engagement.[4] The biomedical model enhances the control and status of the pharmacist, whereas the patient-centered model enhances the control and status of the patient. During biomedical communication, the pharmacist focuses on the treatment of the disease with little attention given to the role of psychological or social influence.[5] In the patient-centered model, the patient collaborates with the pharmacist to: 1) identify treatment goals; 2) choose from regimen options; 3) monitor symptoms and evaluate regimens; and 4) revise regimens if problems occur.[6] In the patient-centered model, the pharmacist works directly with a patient and in conjunction with other practitioners to take responsibility for achieving the optimized outcomes of drug therapy.[7] It involves the development of an individualized care plan to achieve the intended goals of therapy with appropriate follow-up to determine patient outcomes.[8] Several studies have found an association between patient-centered communication and increased patient satisfaction, treatment adherence, improved medical outcomes, and decreased number of malpractice claims.[9–14]

To transition to patient-centered care, pharmacists require strong communication skills.[15] Two recent review articles have examined patient–pharmacist communications. Shah and Chewning found that research has focused on one-way communication from the pharmacist to the patient.[3] Puspitasari et al took an international perspective and found pharmacist counseling rates vary worldwide from 8% to 100%, with more counseling for new rather than refill prescriptions.[16] Pharmacists more routinely provided information on directions for use, dose, medication name, and indications than on side effects, adverse events, and storage.[16] Both studies reported diverse research methods with a focus on self-report surveys, non-participant observation, interviews, and shopper studies that were cross-sectional in nature. These studies frequently focused on the pharmacist and did not capture actual patient–pharmacist interactions. Shah and Chewing reported only one audio analysis that was conducted by Blom et al[17] Puspitasari et al mentioned the same research in addition to a study by Evans and John[18] and Livingstone.[19]

An analysis of patient–pharmacist recordings would allow for detailed study of patient-centered care. Audio or video recordings of patient–pharmacist interactions can capture the detail of what happens in real interactions between patients and pharmacists, how these interactions transpire, and provide evidence as to why communication occurs.[20] Standardized questionnaires and interviews test hypotheses by measuring pre-specified constructs. Respondents construct a belief or attitude that may vary in differing situations.[21] Qualitative interviews allow for greater exploration, but as with structured surveys, rely on recall of events. Observational research with simulated patients (e.g., pseudo-patients, secret shoppers) or pharmacy observations have an important role in determining "what" happens in a patient–pharmacist interaction whether it is the