

## Reporting Guideline for Medication Adherence Research Quality: EMERGE

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### SECTION 1. THE NEED FOR GUIDELINES FOR REPORTING MEDICATION ADHERENCE RESEARCH STUDIES

As the global prevalence of chronic diseases has increased, the number of patients taking medications to manage symptoms and control their diseases has also increased. Medication adherence (MA) is a core component of self-care for managing symptoms, controlling diseases, and reducing complications and mortality. Its widely used traditional definition is “the extent to which patients take medications as prescribed by their healthcare providers” [1]. Nurses in the interprofessional team play a key coordinating role in promoting self-care for patients taking medication. Although many observational and intervention studies on MA have been conducted in nursing and other disciplines, MA outcomes are inconsistent because of variations in its conceptual definition, taxonomy, and measurement [2,3]. Guidelines for designing and reporting research studies on MA are needed. This editorial introduces recently published international reporting guidelines for quality reporting of MA methods and results.

### SECTION 2. THE DEVELOPMENT OF THE GUIDELINES

The international multidisciplinary expert panel (composed of individuals from the fields of nursing, medicine, pharmacology, and others) developed and validated the “European Society for Patient Adherence, COMpliance, and Persistence (ESPACOMP) Medication Adherence Reporting Guideline (EMERGE)” [2–4]. EMERGE comprises 21 items organized into two sections: one consists of four items considered to be the basic and crucial reporting criteria, and another consists of 17 items specific to MA across the various sections of a research report [2,3].

EMERGE was developed based on a previously reported taxonomy for the description and definition of MA. In this taxonomy, MA is defined as “the process by which patients take their medications as prescribed” (p. 696), which includes timing, dosage, and frequency [5]. The conceptual basis of MA is divided into three phases: A, B, and C. A stands for initiation: taking the first dose of a prescribed drug (e.g., late, incomplete, or non-initiation). B stands for implementation: the extent to which patients’ medication intake aligns with the prescribed regimen from initiation until administration of the final dose (e.g., late, missed, extra, or decreased doses or drug holidays). Finally, C stands for per-

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sistence: the time between initiation and the final dose or discontinuation (i.e., stopping the prescribed drug on their own) (e.g., early discontinuation or non-persistence) [5]. The basic and crucial reporting criteria include these three MA phases of MA (i.e., ABC classification), the operational definition for each phase, the assessment of each phase, and the findings from the analysis of each phase.

### SECTION 3. THEIR INCLUSION IN THE EQUATOR NETWORK

EMERGE and other existing reporting guidelines, such as the Consolidated Standards of Reporting Trials (CONSORT) and the STrengthening the Reporting of OBServational studies in Epidemiology (STROBE), are included in the network of guidelines known as Enhancing the QUALity and Transparency of Health Research (EQUATOR) [6]. It is strongly recommended that EMERGE be used in harmony with other existing reporting guidelines for clinical trials. In this manner, the quality of reporting the methods and results of MA research (e.g., MA phases, operational definition, assessment, and findings from analysis) will be improved in terms of consistency and appropriateness [2,3,5].

### SECTION 4. ENCOURAGING AUTHORS OF THESE STUDIES TO USE THE GUIDELINES

EMERGE provides authors and journal editors with the ideal reporting guidelines for MA observational and intervention studies [2,3,6]. Using EMERGE, researchers can improve the transparency and components of reporting to advance this research area. It also allows the synthesis of findings across studies (i.e., systematic reviews and meta-analyses), with the long-term goal of moving evidence-based MA interventions into clinical practice and healthcare policy [2,3].

## SECTION 5. ENCOURAGING EDITORS OF NURSING JOURNALS TO ADOPT THE GUIDELINES

Using EMERGE, healthcare journal editors can improve the quality of MA research journal publications, ensuring that results can be easily compared and synthesized across studies [2,3,7]. Nurses, who have been the most trusted healthcare professionals for the past 20 years [8], can play an important role in developing, implementing, and evaluating novel interventions to improve patients' adherence to medication regimens [2,3]. To address the costly problem of poor MA, researchers and clinicians should conduct, disseminate, and translate into practice high-quality research [2,3,7]. Researchers who design, conduct, and disseminate results from MA studies that adhere to EMERGE and clinicians who translate these results into practice will improve processes and outcomes of care for patients taking medication [2,3]. Authors, peer reviewers, and editorial staff of the *Journal of Korean Academy of Nursing* are encouraged to use and conduct empirical studies on EMERGE to encourage others to actively adopt it in the future.

### CONFLICTS OF INTEREST

The authors declared no conflict of interest.

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