

# A New Taxonomy for Medication Adherence and Compliance

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## INTRODUCTION

The terminology used to describe the behaviors and process of following prescribed medication regimens has been inconsistently applied throughout the literature. Terms such as compliance, adherence, concordance, and persistence are used often interchangeably, and without regard for the relationships between concepts and overlap in definitions.

## OBJECTIVE

To obtain a European consensus on terminology used in the field of patient compliance and adherence, and to propose a rigorous taxonomy that supports quantitative, pharmacometrically sound assessments of the consequences of different types of non-adherence.

## METHODS

### Systematic Literature Review

- Databases: MEDLINE, EMBASE, Cochrane, CINAHL, PsycINFO
- **Inclusion criteria**
  - All papers focusing on the terminology used to describe deviations from assigned pharmaceutical treatment of ambulatory patients
- **Exclusion criteria**
  - Papers that did not address deviations from or refusal of pharmaceutical therapy
  - Papers that did not specify the taxonomy used
  - Papers published in a language other than English

### Consensus Meeting

The proposed terminology was presented and discussed at the 'European Consensus Meeting on the Taxonomy/Terminology in the Field of Patient Adherence' in September 2009

### Adherence Wiki

The methodology and proposed terminology was posted on a wiki site ([wiki.espacomp.eu](http://wiki.espacomp.eu)) from October 2009 to December 2009 for general review and public comment

## RESULTS



### Search Results

- 3121 potential papers
- Additional 42 identified from reference lists and team members
- 142 papers met inclusion criteria
- More than 10 terms have been used over the past 50 years to describe concepts relating to medication-taking behavior

### New Taxonomy

- The term 'compliance' should be dropped
  - 'Compliance' has other meanings in many biomedical fields.
  - Viewed as a judgmental term when applied to patient behavior
- The multi-level influence of the health care system and the patient's physical and social environment must be considered.

### Medication Therapy Management

The overall process of assisting patients in the initiation and conduct of their drug therapies.

### Medication Adherence

- The process by which patients take prescribed medications. It consists of three parts: *initiation* of dosing, *execution* of the dosing regimen, and the eventual *discontinuation* of dosing.
- Medication Adherence is best quantified using two parameters:
  - *Execution*: patients' accuracy in following the day-to-day dosing regimen while still actively taking the medication
  - *Persistence*: the length of time that the patient continues to be engaged with the prescribed dosing regimen

### Adherence-Related Behavioral Science

The many disciplines concerned with patients' and providers' decision-making, acceptance of, and ability to effectively adhere to a medication regimen.

### Pharmionics

The discipline concerned with the quantitative assessment of what patients do with prescribed medicines.

## CONCLUSIONS

- The current terminology does not fit the concepts being measured, nor has it kept up with technological developments in adherence measurement.
- We propose a new taxonomy that separates adherence into sub-concepts of execution and persistence, while recognizing that there are multi-level influences on patient agreement to prescribed therapy and subsequent adherence behaviour.