

# ASSESSMENT OF EVIDENCE-BASED PRACTICE GUIDELINES IN PSYCHIATRY



Jagoda Pasic  
Department of Psychiatry, University of Washington

## Abstract

**Objective:** Conical practice guidelines have been developed to improve the process and outcomes of health care. Most guidelines utilize clinical experience, expert opinions and research evidence. The strength of treatment recommendations is ideally assessed by the quality of the research evidence. Hence, the key component of guidelines is how accurately they reflect the inference conferred by the underlying research evidence. This study assesses the quality of evidence used in the Practice Guidelines for psychiatric disorders.

**Methods:** The quality of evidence was assessed by indentifying the references in 8 guidelines with evidence originating from (A) randomized-controlled studies, (B) clinical trials, (C) longitudinal studies, (D-G) retrospective/secondary data.

**Results:** The total number of references used in the guidelines was 2402. The distributions of the evidence was: (A) 14-28%, (B) 2-21%, (C) 3-17%, (D-G) 42-69%. These results show that the practice guidelines in psychiatry are based on 28% high quality evidence at best and the larger proportion of references originates from lower quality evidence.

**Conclusions:** This study outlines the current status of evidence the guidelines are based on. It also indicates that practice guidelines in psychiatry may need improvement with higher quality evidence. APA's Practice Research Network for enriching practice-based research in psychiatry may contribute towards this goal.

## Introduction

Clinical practice guidelines in psychiatry have been developed to:

- ◆ improve quality of patient care,
- ◆ improve objectivity in decision making, and
- ◆ optimize outcomes and resource utilization.

Practice guidelines are designed to synthesize information from clinical experience, expert opinions and research evidence. The strength of practice guidelines generally is based on the quality of research evidence used for treatment recommendation. The higher the quality of primary research that is synthesized in the guidelines, the more evidence-based the practice guidelines are likely to be.

The current psychiatric practice guidelines incorporate information that uses the coding system based on the hierarchy of evidence. However, how much high quality evidence is used in evidence-based practice guidelines as a whole is not known.

The *objective* of this study is to assess the quality of evidence used in the Practice Guidelines for psychiatric disorders.

## Methods

The quality of evidence was assessed by analyzing the references used in the following practice guidelines:

1. Practice guidelines for the treatment of patients with panic disorders (1998),
2. Practice guidelines for the treatment of patients with Alzheimer's disease and other dementias of late life (1997),
3. Practice guidelines for the treatment of patients with schizophrenia (1997),
4. Practice guidelines for the treatment of patients with nicotine dependence (1996),
5. Practice guidelines for the treatment of patients with substance abuse disorders: alcohol, cocaine, opioids (1995),
6. Practice guidelines for the treatment of patients with bipolar disorder (1994),
7. Practice guidelines for major depressive disorder in adults (1993),
8. Practice guidelines for eating disorder (1993).

The hierarchy of evidence was assessed and ranked by identifying the references with evidence originating from:

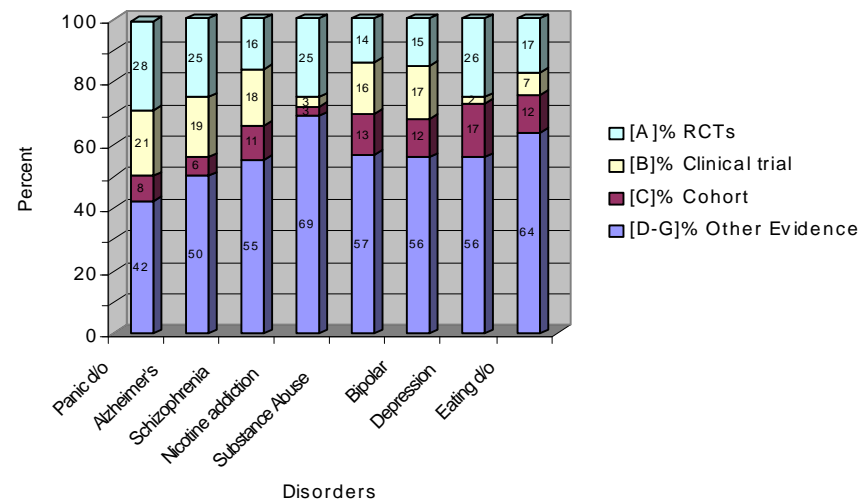
- (A) randomized-controlled studies (RTC),
- (B) clinical trials,
- (C) cohort/longitudinal studies,
- (D-G) retrospective/secondary data.

## Results

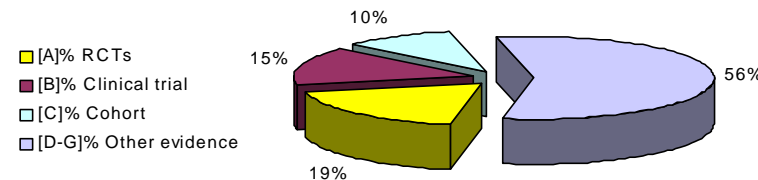
### Distribution of Evidence by Psychiatric Disorder

Disorder	Year	No. of Refs	RCTs		Clinical Trial		Cohort		Other	
			[A] %	%	[B] %	%	[C] %	%	[D-G] %	%
1. Panic d/o	1998	273	77	28	58	21	22	8	116	42
2. Alzheimer's	1997	243	60	25	47	19	15	6	121	50
3. Schizophrenia	1997	580	91	16	106	18	63	11	320	55
4. Nicotine addiction	1996	219	55	25	6	3	7	3	151	69
5. Substance abuse	1995	481	67	14	77	16	64	13	273	57
6. Bipolar	1994	257	39	15	44	17	30	12	144	56
7. Depression	1994	169	44	26	3	2	28	17	94	56
8. Eating d/o	1993	180	31	17	13	7	21	12	115	64
Avrge of all d/o		2402	464	19	354	15	250	10	1334	56

### Types of Evidence by Psychiatric Disorder



### Types of Evidence for All Psychiatric Disorders



## Conclusions

This study outlines the current status of evidence used in the psychiatric practice guidelines.

- ◆ On the whole, 56% of current practice guidelines are based on lower quality evidence or evidence originating from retrospective and/or secondary data.
- ◆ Only 19% evidence originates from high quality evidence, i.e. from randomized controlled clinical trials.
- ◆ It is believed that the main reason for such status is a result of insufficient outcome data which limits the quality of practice guidelines.

The newer guidelines on Alzheimer's disease and Panic disorder indicate a trend of increased percentage of higher quality evidence used (23% and 28%, respectively).

- ◆ Lower quality evidence in these guidelines was reduced to 50% and 42%, respectively.
- ◆ This trend is suggestive of potential for guidelines to improve as the clinical and scientific evidence are generated and integrated into guidelines.

The ultimate goal for practice guidelines is to:

- ◆ Increase the amount of highest quality evidence (RTC), and/or
- ◆ Decrease the amount of lower quality evidence.

Some of these goals will be achieved by:

- ◆ conducting more randomized controlled clinical trials and integrating the results into guidelines,
- ◆ using novel clinical research approaches such as the APA's Practice Research Network.

The Practice Research Network is being proposed as an interface between controlled clinical investigations and other research. Data from this type of research in the future may qualify to be classified as a higher quality evidence which may provide another way of bridging the gap between the higher and lower quality evidence used in the psychiatric guidelines.

## References

- Cook DJ, Greengold NL, Ellrodt AG, Weingarten SR: The relation between systematic reviews and practice guideline. *Ann Intern Med* 127:210-216, 1997.
- Ruch AJ: Clinical Practice Guidelines: Good news, bad news, or no news? *Arch Gen Psychiatry* 50:483-490, 1993.
- Zarin DA, Pincus HA, West JC, McIntyre JS: Practice-based research in psychiatry. *Am J Psychiatry* 154:1199-1208, 1997.