NARRATIVE AND SYSTEMATIC REVIEWS: COMPLEMENTING EACH OTHER AND OPTIMIZING SCIENTIFIC UNDERSTANDING

Shelley Lindley1, Natalie Dennis1, and Sheelah Smith1

1PAREXEL International, Worthing, UK

ABSTRACT

Objective: Scientific knowledge is continually advancing. To make best use of these developments, healthcare workers, researchers, and decision makers need to keep up to date. Systematic and narrative reviews are some of the best methods for reporting consolidated information and communicating this to a wide audience. We assessed the differences between systematic and narrative reviews and discussed how they can be used to extend scientific understanding.

Research design and methods: A PubMed literature search using the title and abstract fields was undertaken. Only papers that mentioned or discussed the differences between systematic and narrative reviews were included. All PubMed hit areas were included.

Results: A total of 103 articles were identified, eight were not the inclusion criteria. Data showed that 32 papers were performing a narrative review; 26 were performing a systematic review. Of the 44 papers performing both reviews, 32 reached markedly different conclusions. In a systematic review of clinical trials, the effectiveness of atypical antipsychotics in the treatment of schizophrenia concluded that "olanzapine and risperidone showed a greater overall improvement" compared to haloperidol or two other conventional antipsychotics. In contrast, narrative reviews concluded that "olanzapine is an effective long-term maintenance option in schizophrenia," as well as "more efficacious for positive and negative symptoms than typical antipsychotics." The differences in the conclusions drawn from the same source studies were suggested to be due to differences in author interpretation and methodological bias. Trials with narrative reviews, as well as reference bias. Systematic reviews were found to be a more objective and independent method of decision making and reliable reviews. Narrative and systematic reviews are robust methods for consolidating the data and synthesising it.

Conclusions: Dissemination of this research in the small sample size of studies included made it clear the need for more robust and independent research. We argue that systematic and narrative reviews differ, and how they can be used to extend scientific understanding and improve clinical practice.

KEY RECOMMENDATION

Where possible, systematic and narrative information should be partnered so as to allow for the most informed decisions to be made.

RESULTS

The number of review articles published is increasing.

In 1963, a total of 20 articles classified as “reviews” were published; By 2014, this increased to 72,887 (Figure 1).

The systematic reviews are more common versus narrative reviews; however, publication volume of both types has increased in the past decade.

Some studies examined and different conclusions drawn.

Data showed that systematic and narrative reviews reporting the same data often reached markedly different conclusions. Indeed, reviews included four of the same clinical trials on the effectiveness of atypical antipsychotics in the treatment of schizophrenia showed markedly different conclusions in their conclusions.

- Key differences:
  - Systematic review found atypical antipsychotics to be more beneficial than typical antipsychotics.
  - Narrative reviews were conflicting as to whether atypical antipsychotics were superior to typical antipsychotics.

- Narrative reviews had conflicting conclusions regarding long-term use of atypical antipsychotics.
  - Olanzapine may be more effective for negative symptoms and the incidence of extrapyramidal effects is significantly lower than with haloperidol.
  - Olanzapine is effective long-term maintenance option in schizophrenia.
  - It is questionable as to whether the superiorities of risperidone are clinically relevant.

- Systematic review found atypical antipsychotics to be effective for positive symptoms.
  - A meta-analysis of randomized controlled trials.
  - Olanzapine showed better overall improvement than placebo.

- Narrative reviews were conflicting as to whether or not atypical antipsychotics were comparable to placebo.
  - Some studies showed that atypical antipsychotics were more efficacious than placebo, whereas other studies showed that atypical antipsychotics were no better than placebo.

- Systematic review found atypical antipsychotics to be more efficacious than typical antipsychotics in the treatment of schizophrenia.
  - Olanzapine and risperidone showed better efficacy than haloperidol or placebo.

- Narrative reviews were conflicting as to whether or not atypical antipsychotics were superior to placebo.
  - Some studies showed that atypical antipsychotics were more efficacious than placebo, whereas other studies showed that atypical antipsychotics were no better than placebo.

SUMMARY

The differences in the conclusions drawn from the same source studies could be due to differences in author interpretation, methodological flaws, and reference bias. Systematic reviews allow best practice and knowledge to be collated, distilled and disseminated in a relatively unbiased, accurate and trustworthy manner. However, their design is such that the focus is narrow and key aspects may not be included based on methodology. Narrative reviews offer an insight into the experienced current opinion of the authors and add more comprehensive information coverage.

The main limitation of this research is the small sample size of studies included, which restricts the conclusions that can be made.

CONCLUSIONS

- Narrative reviews had conflicting conclusions regarding long-term use of atypical antipsychotics.
  - Olanzapine may be more effective for negative symptoms and the incidence of extrapyramidal effects is significantly lower than with haloperidol.
  - It is questionable as to whether the superiorities of risperidone are clinically relevant.

- Systematic review found atypical antipsychotics to be effective for positive symptoms.
  - Olanzapine showed better overall improvement than placebo.

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