Assess the Effectiveness of Self-Instructional Module on Knowledge regarding Adverse Effects of Antipsychotic Drugs among Care Takers of Mentally Ill Patients

Mukesh Patil

Assistant Professor, RKDF College of Nursing, Bhopal.

DOI: https://doi.org/10.24321/2348.2133.201807

Abstract

This study was conducted to assess the knowledge level of all the care takers of mentally ill patients. The self instructional module significantly brought out their improvement in the knowledge regarding adverse effects of antipsychotic drugs. An adverse effect may be caused by administration of an antipsychotic medication or by exposure to a chemical and be indicated by an untoward result such as extrapyramidal symptom, etc. The data was collected with structured interview schedule and then analysis of data done and the findings showed that there was significant difference between pre-test and post test knowledge of care takers.

Keywords: Self-Instructional Module (SIM), Care Takers, Mentally Ill Patient, Antipsychotic Drugs

Introduction

Kathleen A. Cameron et al. (2004) stated that modern medicines have contributed to longer life spans, improved health and better quality of life. Medications are the most common treatment for many diseases and conditions seen in older people and persons with disabilities. Medicines now not only treat and cure diseases that were untreatable just a few years ago, they aid in the early diagnosis of disease; prevent life-threatening illnesses; relieve pain and suffering; and allow people with terminal illnesses to live more comfortably during their last days.¹

Townsend C. Mary (2008) stated that the first atypical antipsychotic, clozapine, was discovered in the 1950s and introduced clinically in the 1970s. Both generations of medication tend to block receptors in the brain's dopamine pathways, but antipsychotic drugs encompass a wide range of receptor targets. A number of adverse side effects have been observed, including lowered life expectancy, weight gain, agranulocytosis, tardive dyskinesias, akathisia, sexual dysfunction, psychosis and dysphoria & diabetes. The development of new antipsychotics and the relative efficacy of different ones. The most appropriate drug for an individual patient requires careful consideration.²

Need of the Study

Boyd Mary Ann (2009) stated that second-generation antipsychotic medications had rapid and significant weight gain, as well as troublesome changes to cholesterol levels and other metabolic measures, a new study reports. The researchers urge that the potential risks and benefits of these medications be carefully assessed.³

Sreevani R. (2010) stated that antipsychotics are usually pills that people swallow, or liquid they can drink. Some antipsychotics are shots that are given once or twice a month.⁴

Statement of Problem

A study to assess the effectiveness of Self-Instructional Module (SIM) on knowledge regarding adverse effects
of antipsychotic drugs among care takers of mentally ill patients admitted in selected hospitals, Bhopal (M.P.).

**Objectives**
- To assess the knowledge regarding adverse effects of antipsychotic drugs among care takers of mentally ill patients.
- To evaluate the effectiveness of Self Instructional Module on knowledge regarding adverse effects of antipsychotic drugs among care takers of mentally ill patients.
- To associate the knowledge regarding adverse effects of antipsychotic drugs among care takers of mentally ill patient with selected demographic variables.

**Hypothesis**
- $H_1$: There will be statistically significant increase in post test knowledge scores regarding adverse effects of antipsychotic drugs among care takers of mentally ill patients admitted in selected hospitals, Bhopal (M.P.).
- $H_2$: There will be have adequate knowledge regarding adverse effects of antipsychotic drugs among the care takers of mentally ill patients.

**Research Methodology**
- **Research Approach:** Interventional research approach
- **Research Design:** Quasi experimental research design
- **Setting:** L.N. Medical College & J.K. Hospital, Bhopal
- **Population:** All the Care takers of mentally ill patients
- **Sampling Technique:** Non-probability convenient sampling
- **Setting Criteria:** The care takers who read and speak Hindi/English, willing to participate in the study and available at the time of data collection
- **Duration:** One Month
- **Sample Size:** 60
- **Tools for Data Collection:** Structured questionnaire for assessing the knowledge of care takers regarding adverse effects of antipsychotic drug
- **Data Collection Procedure:** The participants were interviewed using a structured questionnaire with 30 items which included knowledge, skill and attitude

### Scoring Key

| S. No. | Level of Knowledge Score | Score Range | Percentage Range (%) | Pretest score | Post test score |
|--------|--------------------------|-------------|----------------------|--------------|----------------|
| 1.     | Poor                     | 0-6         | 0-19                 | 0            | 0.00           |
| 2.     | Average                  | 7-12        | 20-39                | 10           | 16.67          |
| 3.     | Good                     | 13-18       | 40-59                | 41           | 68.33          |
| 4.     | Very Good                | 19-24       | 60-79                | 9            | 15.00          |
| 5.     | Excellent                | 25-30       | 80-100               | 32           | 53.33          |

**Criteria for Sample Selection**

**Inclusion Criteria**
- The care takers who read and speak Hindi/ English
- Care takers willing to participate in the study and available at the time of data collection

**Exclusion Criteria**
- Those who involved in pilot study were excluded for main study
- Care takers more than 65 years of age
- Care takers less than 18 years of age
- Care takers more than fifteen years of experience of caring mentally ill patient
- Care takers who have any diploma and degree in mental health program
- Care takers are working in the filed of health profession

**The areas Covered in the Self-Instructional Module were**
- General knowledge on mental illness
- Causes of mental illness
- Sign and symptoms of mental illness
- Adverse and side effects of antipsychotic drugs
- Management of adverse effects of antipsychotic drugs

**Result**
Evaluation of Effectiveness of Self Instructional Module on Knowledge Regarding Adverse Effects of Antipsychotic Drugs Among Care Takers of Mentally Ill Patients.

| Level of knowledge score | Score range | Percentage Range (%) | Pretest score | Post test score |
|--------------------------|-------------|----------------------|--------------|----------------|
| Minimum scores           |             |                      | 09           | 15             |
| Maximum scores           |             |                      | 20           | 29             |
| Mean scores              |             |                      | 872/60=14.53 | 1398/60=23.3   |

**Table 1. Comparison of knowledge in pre test and post test**

**Table 1. Comparison of knowledge in pre test and post test**

| Level of knowledge score | Score range | Percentage Range (%) | Pretest score | Post test score |
|--------------------------|-------------|----------------------|--------------|----------------|
| Poor                     | 1-6         | 0-19                 | 0            | 0.00           |
| Average                  | 7-12        | 20-39                | 10           | 16.67          |
| Good                     | 13-18       | 40-59                | 41           | 68.33          |
| Very Good                | 19-24       | 60-79                | 9            | 15.00          |
| Excellent                | 25-30       | 80-100               | 32           | 53.33          |
Above table shows that in pre test scores, 68.33% of subjects are good knowledge, 16.67% of subjects are average knowledge and 15% subjects are very good knowledge. Minimum score is 09; maximum score of pre test is 20 and mean score is 14.53 but in post test scores 53.33% of subjects are excellent knowledge, 40% of subjects are very good and 6.67% subjects are good knowledge. Minimum score is 15; maximum score of pre test is 29 and mean score is 23.3.

Table 2. Significance of difference between knowledge scores in pre and post test among care takers of mentally ill patients in relation to knowledge of adverse effects of antipsychotic drug

| Overall       | Pre-test Mean±S.D | Post-test Mean±S.D | t-value | p-value |
|---------------|-------------------|--------------------|---------|---------|
| Knowledge score | 14.53±2.71        | 23.30±3.73         | 24.51   | 0.000   |
| Percentage of knowledge score | 48.44±9.06        | 77.66±12.46        |         |         |

Discussion

Table 2 & figure 2, shows the pre test and post test knowledge scores of the adverse effects of antipsychotic drug. Mean and standard deviations values are compared and paired ‘t’ test is applied at 5% level of significance. The tabulated ‘t’ value for n-1, i.e.59 degrees of freedom is 2.00. The calculated values are 24.51 respectively for knowledge regarding adverse effects of antipsychotic drugs. The calculated ‘t’ values are much higher than the tabulated values at 5% level of significance which is statistically acceptable level of significance. In addition the calculated ‘p’ values for all the areas of knowledge regarding adverse effects of antipsychotic drug are 0.000 which is ideal for any population. Hence it is statistically interpreted that the self instructional module regarding different aspects of adverse effects of antipsychotic drugs was effective. So thus the H1 is accepted.

Conclusion

The study revealed that the care takers do not have 100% knowledge regarding adverse effects of antipsychotic drugs. There was a significant increase in the knowledge of subjects after the introduction of self instructional module. So it was concluded undoubtedly that the written prepared material by the investigator in the form of SIM helped the care takers to improve their knowledge on adverse effects of antipsychotic drug.

Ethical Clearance

Permission was taken from the concern authorities in L.N. Medical College & J.K Hospital, Bhopal. Informed consent from the samples was obtained. Confidentiality and privacy of data was maintained.

Source of Fund: Self

Conflict of Interest: None

References

1. Basavanthappa BT. Psychiatric mental health nursing: antipsychotic drug. New Delhi. Jaypee brothers medical
2. Basvanthappa BT. Nursing research. Research design. New Delhi: Jaypee brothers medical publishers; 2007.
3. Bates DW, Cullen DJ, Laird N et al. Incidence of adverse drug events and potential adverse drug events. Implications for prevention. JAMA 1995; 274: 429-434.
4. Suddock BJ, Sadock VA. Concise text book of clinical psychiatry: antipsychotic drugs. 3rd edition. Philaldfphia: Lippincott publication; 2008.
5. Ann BM. Psychiatric nursing contemporary practice: Antipsychotic drug. 3rd edition. United state of America: Lippincott Williams &Wilkins; 2005.
6. Ann BM. Psychiatric nursing contemporary practice: Antipsychotic drug. 3rd edition. United state of America: Lippincott Williams &Wilkins; 2005.
7. Cameron KA, Finley R. Care givers guide to medications and aging. Family care givers alliance 2004. Available from: http://www.caregivers.org/.
8. Sreevani R. Psychiatric and mental health nursing: antipsychotic. 2nd edition. New Delhi: Jaypee brothers medical publishers; 2010.
9. Mary TC. Psychiatric mental Health Nursing: antipsychotic. 5th edition, 2008.

Date of Submission: 2019-02-27
Date of Acceptance: 2019-03-19