A Study to Assess the Effectiveness of Video Assisted Teaching Program on Knowledge Regarding the Side Effects of Antipsychotics among Primary Care Givers of Clients With Mental Illness in Selected Mental Health Hospital, Chennai

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Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

Article Information

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ABSTRACT

Background: The main aim of this study is to create an awareness regarding the side effects. The primary care givers and the patients should understand that if side effects are there also they do not stop the medicines. The psychotic medicines are very essential for the treatment and it should be effectively managed and given only after the consultation with the physician. So a basic knowledge regarding drugs, side effects and the immediate management of these side effects are essential.

Methodology: Present study was conducted on quantitative approach for analyzing knowledge management of the psychotic drugs among the care takers based on the conceptual frame work, Imogene King’s Goal attainment theory. The research design selected for the present study was one group pretest and posttest design (01 - X - 02). The sample of the study comprised of 40 primary care givers who are staying with the mentally ill clients in the selected mental health centers.
Results and Discussion: Among the total 40 sample of primary care givers out of 14 (35%) in 29-38 years of age and 60% were females. 50% having secondary education. Hindu (65%). 52.5% of people worked in private job. Only 55% informed that their income was higher than 10000, 55% from urban area. While in the post -test, 1(2.5%) of the subject had average knowledge, 19(47.5%) subject had good knowledge and 20(50%) subject had excellent knowledge regarding the side effects of antipsychotics. The comparison between the mean difference in pre-test and post test score was 8.2. The calculated 't' value was 13.71, whereas the tabulated't' value was 2.02, shows that the calculated ‘t’ value was much higher than the tabulated ‘t’ value. 

Conclusion: It shows that the planned teaching was effective in significant improving the knowledge of primary care givers of psychiatric patient regarding side effects of typical antipsychotics, so the null hypothesis $H_0$ is rejected and the research hypothesis $H_1$ is accepted.

Keywords: Typical antipsychotics; primary care givers; side effects of antipsychotics; planned video teaching.

1. INTRODUCTION

A lot of side effects are accompanied with antipsychotics. But these side effects are treatable with the help of other medications like anticholinergic. But the patient and care giver do not know that these side effects are treatable [1,2]. So they may quit the medicines after the discharge. The main aim of this study is to create an awareness regarding the side effects. They should understand that if side effects are there also they do not stop the medicines [3,4]. The medicines are very essential for the treatment. They can do the immediate management and consult the doctor. So a basic knowledge regarding drugs, side effects and the immediate management of these side effects are essential. Management of side effects depends actually on recognition of its presence [5,6]. Patients may not be aware that a particular symptom is drug related and hence do not complaint (Lingered et al. 1987) or they may not be aware about its presence at all. Some studies have shown that there is none recognition of extra pyramidal symptoms, (Alexopoulos GS 1979). So a health education regarding antipsychotics is very essential.

In India the reported rate of mental illness is 100 per thousand population. It has been estimated that 20% - 50% of any patient population is at least partially complaint and that in patients with schizophrenia and related psychotic disorders rates run as high as 70%-80% [7,8]. The WHO is currently undertaking a global survey of 26 countries in all regions of the world, based on ICD and DSM criteria [9-11]. The first published on the 14 country surveys completed to date, indicate that, of those disorders assessed, anxiety disorders are the most common in all but 1 country (prevalence in the prior 12-month period of 2.4% to 18.2%) and mood disorders next most common in all but 2 countries (12-month prevalence of 0.8% to 9.6%), while substance disorders (0.1%–6.4%) and impulse-control disorders (0.0%–6.8%) were consistently less prevalent. It has been estimated that of largest prevalence rate of psychiatric illness. In the U.S find the anxiety disorders affect 15.7 million people in united states each year [12].

Antipsychotic drugs do not cure mental illness but can reduce some of the symptoms or make them milder. They are usually in pill or liquid form. Symptoms like delusions usually go away within a few weeks. After about six weeks, many people will see a lot of improvement. However, people respond in different ways to antipsychotic medications, and no one can tell how a person will respond. Sometimes a person needs to try several medications before finding the right one. Usually, relapse happen when people stop taking their medication, or when they only take it sometimes. Some people stop taking the medication because they feel better or they may feel they don't need it anymore [13].

2. METHODOLOGY

2.1 Research Approach

Present study was conducted on quantitative approach is used in this study. This approach was selected because the aim of this research study was to evaluate the effectiveness of planned Video Assisted teaching in improving the knowledge of primary care giver regarding side effects of typical antipsychotics drugs. With this approach it would be possible to describe the knowledge of primary care givers regarding side effects of typical antipsychotic drug. The quantitative approach would help the investigator
to evaluate the effect of “Planned Video Assisted Teaching” on the variable that is knowledge of the primary care givers.

2.2 Research Design

The research design selected for the present study was one group pre test post test design (01 - X - 02).

2.3 Setting of the Study

The study was conducted in a selected hospital. The rationale for selecting this setting was easy transport, familiarity with the setting, administrative approval, cooperation and availability of subject.

2.4 Sample and Sampling Technique

In this study sample size was 40 primary care giver of psychiatric patient who take typical antipsychotics. Sampling refers to the process of selecting the portion of the population to represent the entire population.

Tool: Knowledge questionnaire is used to gather information.

2.5 Variables Understudy

Independent variable in the present study the independent variable is video assisted Video Assisted teaching program regarding the side effects of antipsychotics.

Dependent variable Level of knowledge of primary care givers of mentally ill clients regarding side effects of antipsychotics

2.6 Setting of the Study

The study was conducted in selected mental health centers (No. 5).

2.7 Population

Target population consists of primary care givers who are staying with the mentally ill clients in the selected mental health centers.

2.8 Sample and Sampling Technique

The sample of the study comprised of 40 primary care givers who are staying with the mentally ill clients in the selected mental health centers. After seeking permission from the higher authority, the subjects were selected by using purposive sampling technique.

2.9 Criteria for the Selection of Sample

Inclusion Criteria: Primary care givers those who are staying with the client in selected mental health centers at Chennai, both gender of primary care givers of mentally ill clients. Primary care givers who can understand Tamil or English.

Exclusion Criteria: Primary care givers those who have chronic physical & psychiatric illness. Temporary care giver (1 or 2 days) not included.

2.10 Description of the Tool

A structured questionnaire is used to assess the level of knowledge regarding the side effects of antipsychotics before and after the video assisted teaching program.

2.11 Data Collection Procedure

Phase 1: The pretest level of knowledge was assessed for the selected group of primary care givers of mentally ill clients regarding the side effects antipsychotics by a structured questionnaire. It was carried out in an interview method. Phase 2: After the pre test a video assisted teaching program was conducted to the same group regarding the side effects of antipsychotics. Phase 3: Post test level of knowledge regarding the side effects of antipsychotics assessed after seven days of video assisted teaching program with the same structured questionnaire with interview schedule.

2.11.1 Section I: Data on demographic variable of primary care givers

This section deals with the frequency and percentage distribution of demographic variables of primary care giver psychiatric patient (Table 1).

2.11.2 Section II: Assess the effectiveness of video assisted teaching program on knowledge regarding the side effects of antipsychotics among primary care givers of clients with mental illness

This section deals with the analysis of the data related to knowledge of primary care givers of psychiatric patient regarding side effects of antipsychotic before and after implementation of
planned video assisted teaching program. The statistical value of means, mean score percentage and standard deviation are used to describe the score (Table 2).

Table 1. Frequency and percentage distribution of variable of primary care givers n=40

| Sr. No. | Demographic variables | Experimental Group(n) | Percentage (%) |
|---------|-----------------------|------------------------|----------------|
| 1.      | Age(years)            |                        |                |
|         | a) 18-28              | 9                      | 22.5%          |
|         | b) 29-39              | 14                     | 35%            |
|         | c) 40-50              | 12                     | 30%            |
|         | d) 51 and above       | 5                      | 12.5%          |
| 2.      | Gender                |                        |                |
|         | a) Male               | 16                     | 40%            |
|         | b) Female             | 24                     | 60%            |
| 3.      | Education             |                        |                |
|         | a) Illiterate         | 3                      | 7.5%           |
|         | b) Primary            | 10                     | 25%            |
|         | c) Secondary          | 20                     | 50%            |
|         | d) Graduation and above | 7                    | 17.5%          |
| 4.      | Religion              |                        |                |
|         | a) Hindu              | 26                     | 65%            |
|         | b) Buddhist           | 8                      | 20%            |
|         | c) Muslim             | 6                      | 15%            |
|         | d) Other(specify)     | 0                      | 0%             |
| 5.      | Occupation            |                        |                |
|         | a) Government servant | 3                      | 7.5%           |
|         | b) Daily labor        | 10                     | 25%            |
|         | c) Private job        | 21                     | 52.5%          |
|         | d) Other(specify )    | 6                      | 15%            |
| 6.      | Monthly income        |                        |                |
|         | a) Up to 10000        | 22                     | 55%            |
|         | b) 10001 to20000      | 8                      | 20%            |
|         | c) 20001 to 30000     | 6                      | 15%            |
|         | d) 30001 and above    | 4                      | 10%            |
| 7.      | Area of residence     |                        |                |
|         | a) Village            | 12                     | 30%            |
|         | b) Semi urban         | 6                      | 15%            |
|         | c) City               | 22                     | 55%            |
|         | d) Other (specify)    | 0                      | 0%             |
| 8.      | Length of stay with patient |    |                |
|         | a) 6 month            | 5                      | 12.5%          |
|         | b) 2years             | 2                      | 5%             |
|         | c) 1years             | 7                      | 17.5%          |
|         | d) 2years and above   | 26                     | 65%            |

Table 2. Frequency and percentage distribution of primary care givers according to level of knowledge n=40

| Sr. No | Level of Knowledge | Pre-Test | Post-test |
|--------|--------------------|----------|-----------|
|        | Score range        | n (%)    | n (%)     |
| 1.     | Poor(0-6)          | 3 7.5%   | 0 0%      |
| 2.     | Average(7-12)      | 29 72.5% | 1 2.5%    |
| 3.     | Good(13-18)        | 8 20%    | 19 47.5%  |
| 4.     | Excellent(19-24)   | 0 0%     | 20 50%    |
2.11.4 Section III: Assess the effectiveness of video assisted teaching program on knowledge regarding the side effects of antipsychotics among primary care givers of clients with mental illness

Table 3. Mean, Standard deviation, mean of differences in scores and 't' value for knowledge regarding side effects of antipsychotics n=40

| Sr. No | Knowledge Level | Mean   | Standard Deviation (S.D.) | Mean differences in score | 't' value |
|--------|-----------------|--------|---------------------------|---------------------------|-----------|
| 1.     | Pre-test        | 10.1   | 2.74                      | 8.2                       | 13.71*    |
| 2.     | Post-test       | 18.05  | 2.34                      |                           |           |

* Significant p<0.05 level
NS-not significant p<0.05 level

Frequency, Percentage and χ² analysis of level of knowledge among primary care givers with their selected demographic variables.

2.11.4 Section IV: Association between the levels of knowledge regarding assess the effectiveness of video assisted teaching program on knowledge regarding the side effects of antipsychotics among primary care givers of clients with mental illness

Table 4. Frequency, percentage and χ² analysis of level of knowledge among primary care givers with their selected demographic variables n=40

| Sr. no | Demographic Variables | Poor N | Satisfactory N | Good N | Chi square (χ²) |
|--------|-----------------------|--------|----------------|--------|----------------|
| 1.     | Age(years)            |        |                |        |                |
| a) 18-28 | 0 0 6 1 2.5          |        |                |        |                |
| b) 29-39 | 1 2.5 10 2 7.5       |        |                |        |                |
| c) 40-50 | 0 0 10 2 5           |        |                |        |                |
| d) 51 and above | 1 2.5 2 5 2 5 |        |                |        | χ²=6.25NS       |
| 2.     | Gender                |        |                |        |                |
| a) Male | 1 2.5 11 2.5 4 10 |        |                |        | χ²=2.73NS       |
| b) Female | 3 7.5 17 42.5 4 10 |        |                |        | df=2           |
| 3.     | Education             |        |                |        |                |
| a) Illiterate | 0 0 2 5 1 2.5 |        |                |        |                |
| b) Primary   | 0 0 8 20 2 5       |        |                |        |                |
| c) Secondary | 2 5 13 32.5 5 12.5 |        |                |        | χ²=4.139NS      |
| d) Graduation and above | 1 2.5 6 15 0 0 |        |                |        | df=6           |
| 4.     | Religion              |        |                |        |                |
| a) Hindu   | 2 5 18 45 6 15     |        |                |        | χ²=2.807NS      |
| b) Buddhist | 0 0 6 15 2 5       |        |                |        |                |
| c) Muslim | 1 2.5 5 12.5 0 0  |        |                |        |                |
| d) Other(specify) | 0 0 0 0 0 0 |        |                |        | df=4           |
| 5.     | Occupation            |        |                |        |                |
| a) Govt. servant | 0 0 3 7.5 0 0 |        |                |        |                |
| b) Daily labor | 0 0 7 17.5 3 7.5  |        |                |        |                |
| c) Private job | 2 5 14 35 5 12.5 |        |                |        | χ²=10.438NS     |
| d) Other(specify) | 1 2.5 5 12.5 0 0 |        |                |        | df=6           |
| 6.     | Monthly income        |        |                |        |                |
| a) Up to 10000 | 0 0 20 50 2 5  |        |                |        |                |
| b) 10001 to 20000 | 1 2.5 4 10 3 7.5|        |                |        |                |
| c) 20001 to 30000 | 0 0 3 7.5 3 7.5 |        |                |        | χ²=13.15*       |
| d) 30001 and above | 1 2.5 3 7.5 0 0 |        |                |        | df=6           |
| Sr. no | Demographic Variables | Knowledge score | Chi square ($\chi^2$) |
|-------|-----------------------|------------------|---------------------|
| 7.    | Area of residence     | Poor  | Satisfactory | Good |                      |
|       |                      | N    | %     | N    | %     | N    | %     |      |
| a) Village | 1       | 2.5 | 11 | 27.5 | 0 | 0 | | |
| b) Semi urban | 1 | 2.5 | 2 | 5 | 3 | 7.5 | | $\chi^2=7.967^{NS}$ df=4 |
| c) City | 1 | 2.5 | 16 | 40 | 5 | 7.5 | | |
| d) Other (specify) | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 8.    | Length of stay with patient | | | | | | | |
|       | a) 6 month | 1 | 2.5 | 3 | 7.5 | 1 | 2.5 | | $\chi^2=3.011^{NS}$ df=6 |
|       | b) 2years | 0 | 0 | 2 | 5 | 0 | 0 | | |
|       | c) 1years | 1 | 2.5 | 5 | 12.5 | 1 | 2.5 | | |
|       | d) 2 years and above | 1 | 2.5 | 19 | 47.5 | 6 | 15 | | |

* = Significant; NS = not significant; df = degree of freedom

3. DISCUSSION

Finding of the Study: The finding including of the study includes, the analysis and interpretation of data collected from the primary care givers in selected mental health centers. Among the total 40 sample of primary care givers out of 14(35%) in 29-38 years of age, most of samples were female 24(60%), 12(50%) having secondary education, 26(65%) of subjects belonged to Hindu religion, 21(52.5%) of sample was on private job, 22(55%) sample having upto10000, 22(55%) samples was from to urban area 26(65%) were having length of stay of more than 2 year. The frequency and percentage distribution of level of knowledge among primary care givers in pre-test. Among 40 samples the pretest score 3(7.5%) subjects were having poor knowledge (0-6) regarding the side effects antipsychotics, while 29(72.5%) had average knowledge (7-12), whereas 8(20%) subject had good knowledge (13-18) and none of the subjects had excellent knowledge about it. While in the post -test, 1(2.5%) of the subject had average knowledge, 19(47.5%) subject had good knowledge and 20(50%) subject had excellent knowledge regarding the side effects of antipsychotics. The comparison between the mean difference in pre-test and post test score was 8.2. The calculated't' value was 13.71, whereas the tabulated't' value was 2.02, shows that the calculated't' value was much higher than the tabulated't' value. It shows that the planned teaching was effective in significant improving the knowledge of primary care givers of psychiatric patient regarding side effects of typical antipsychotics, so the null hypothesis $H_0$ is rejected and the research hypothesis $H_1$ is accepted.

4. CONCLUSION AND RECOMMENDATIONS

This chapter present brief summary of the study and its significant finding. It also include and recommendations for further study and focus on main area of concern that the finding reveals. It reveals important interpretations that may guide to certain definitive intervention and further study in this area.

A quasi experimental study with one group pre test and post test without control group was conducted on 40 primary care givers of psychiatric patients in selected hospital to assess the effectiveness of planned teaching about knowledge regarding side effect of typical antipsychotics. A one group pre-test post-test design without control group was used for the assessment of the existing knowledge and improvement after the implementation of planned teaching within the interval of 7 days.

The main conclusion drawn from the present study is that most of the primary care givers of mentally ill clients had inadequate knowledge in pre test. After giving video assisted teaching program, majority of primary care givers had moderate knowledge regarding side effects of antipsychotics. It reveals that proper video assisted teaching program will change the knowledge of the primary care givers regarding the side effects of antipsychotics. It will help them to improve the drug compliance of the patient. Antipsychotics possess many side effects. Among these some of them are severe. But these side effects are treatable with the help of other medications like anticholinergics. But the patient and care giver do not know that these
side effects are treatable. So they may quit the medicines. The main aim of this study was to create an awareness regarding the immediate management of these side effects. They should understand that if side effects are there also they do not stop the medicines. They may have poor drug compliance because of side effects. This study enables the drug compliance. The primary care givers can guide the patients.

CONSENT
As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL
The study was approved by the Institutional Ethics Committee.

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COMPETING INTERESTS
Author has declared that no competing interests exist.

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