



EFFECT OF “ MODERN PHARMACOLOGY COURSE” ON HOMEOPATHY DOCTORS IN THE MAHARASHTRA STATE

Pharmacology

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ABSTRACT

Background: The State Government of Maharashtra has launched “Modern Pharmacology Course” for homeopathic doctors. The aim of this course is to improve the knowledge of these rural practitioners, so that it will improve the health of rural Maharashtra. After teaching for one year we try to find out the effect of this course by questionnaire based evaluation technique.

Methods: This is a prospective, observational type of study carried out on 50 homeopathic doctors. MCQ based 15 questions of Pharmacology subject were given before and after completion of one year of the said course i.e. pre-test and post-test. Papers were valued on score basis, data recorded and interpreted. Statistical analysis was done by using Student's t test (paired).

Results: Passing percentage of the pre-test was 12% and that of the post-test was 86%. Topper of the pre-test scored 10 (66.66%) marks. Topper of the post-test scored 15 (100%) marks. Mean of scoring in the pre-test was 5.1 (34 %) marks and that of post-test was 10.16 (67.73%) marks. The pre-test and post-test difference was statistically highly significant ($p < 0.001$).

Conclusion: This course had drastically improved the medical knowledge of homeopathic doctors, that will minimize the irrational drug therapy in future.

KEYWORDS

Questionnaire, Homeopathic doctors, Modern Pharmacology, Pre-test & post-test.

Introduction

The state government of Maharashtra has approved the certificate course of one year for registered homeopathy practitioners called 'Modern Pharmacology'. The Maharashtra University of Health Science, Nashik (MUHS) sanctioned the said course from academic year 2016-2017 (resolution no. 139/2015 dated 10.9.2015)¹. After passing this certificate course the homeopathic doctors can prescribe allopathic medicines. This course is started in the government medical colleges affiliated to MUHS Nashik. Maximum intake capacity of each college is around 50 students each college each year¹. We use the term 'Homeopathic Doctors' because the students included both degree (BHMS) and diploma (DHMS) holder of homeopathic system of medicine.

Actual teaching of modern pharmacology in Shri Vasantrya Naik Government Medical College (S.V.N.G.M.C.), Yavatmal was started from December 2016 and ends in November 2017. Morning session contains clinics and OPD duties. Afternoon session contains teaching in the form of lectures and practicals. Total four lectures were taken per week. Two lectures were taken by pharmacology and two lectures by either of medicine, surgery, paediatrics, obstetrics and gynecology and preventive and social medicine as per the time table. Department of pharmacology has taken 61 lectures and 10 practicals during this academic year. Both lectures and practicals were taken by professor, associate professor and assistant professors of pharmacology department. Considering the age of the student (age ranges from 50 to 70 years), utmost care was taken to simplify the subject. The subject was literally translated into local understandable Marathi language and lectures/practicals were taken accordingly.

Present study was carried out in the department of pharmacology, S.V.N.G.M.C. Yavatmal. A well organized questionnaire of 15 MCQ type questions was prepared³. Before teaching started, pre-test was conducted. At the end of pharmacology course, post-test was conducted. All questions were related to pharmacology only.

Material and Methods

This is a prospective, observational type of study carried out in the department of Pharmacology, S.V.N.G.M.C. Yavatmal. Sample size of present study was 50 homeopathic doctors having active private practice at village level ($n=50$). A well organized questionnaire of 15 MCQ of Pharmacology subject was prepared. Each question carries one mark for correct answer and no mark for wrong answer. Maximum 30 minutes time was given for solving these questions³. Pre-test was conducted on 3rd December 2016 and post-test on 23rd November 2017. Students were instructed not to write either roll number or name on answer sheet to avoid the bias. After collecting the answer sheet, random numbers were given to each paper from 1 to 50. As recommended by MUHS, Nashik, passing criteria of 50% marks was

kept for both pre-test and post-test.

Statistics

At 95% confidence interval, alpha error was set to be 0.5, and Student's paired t test was used as a test of significance. P value less than 0.01 ($p < 0.01$) was considered as statistically significant.⁵

Result

Fifty homeopathic doctors ($n=50$) had given pre-test and post-test. The result is given in table no. 1. From result sheet it is clear that in pre-test only 12% students were passed and in post-test 86% students were passed the MCQ Examination (means scored minimum 50% or more marks). The difference between the results is almost 74%. In pre-test only one student scored 10 (66.66%) marks and two students scored 9 (60%) marks out of 15 marks. In post-test one student scored 15 (100%) marks, 2 students scored 14 (93.33%) marks and 5 students scored 13 (86.66%) marks and 30 students scored 10 or more than 10 marks. Minimum marks i.e. one mark (6.66%) was scored by 3 students in pre-test. Minimum 6 (40%) marks were scored by 3 students in the post-test. Mean of scoring marks in pre-test was 5.1 (34%) marks and almost double i.e. 10.16 (67.73%) marks in the post-test. Difference between the pre-test and post-test marks ranges from 1 to 14 marks. Mean of difference is 5.06 (33.73%) marks. By using paired Student's t test, p value was calculated which is less than 0.001 ($p < 0.001$) which indicate highly significant difference between pre-test and post-test marks.

Table 1. Pre-test and post-test analysis of homeopathic doctors in questionnaire based test.

Student's random no.	Pre-test marks(mean)	Post-test marks(mean)	Difference (mean)
01----10	4.1	11.0	6.9
11----20	4.8	09.7	4.9
21----30	4.6	09.6	5.0
31----40	6.6	10.2	3.6
41----50	5.4	10.3	4.9
Mean (percentage)	5.1 (34%)	10.16 (67.73%)	5.06 (33.7)

Discussion

Now a days trend of specialists and superspecialists is going on in medical fraternity. Every medical graduate after passing MBBS is preparing for Post Graduate Entrance Examination. Whether they are capable of it or not, they spent around 3 to 4 or more years for PG Entrance. The medical graduate who got PG diploma or degree, they try to settle at big cities. What about those who have not get any PG diploma or degree? They face 4 or 5 PG Entrance examinations, get frustrated. The practical and

clinical knowledge during these 5 valuable years get rusted and this MBBS graduate is unable to do the general practice. Otherwise 5-7 years is enough time for setting the practice of any MBBS doctor at any tahasil or big village level. But no one is ready to go to village level.

Another option is that those practioners who are doing their general practice at village level can be trained in modern medical science. So that scientific allopathic practice can be carried out at village level. Hence this Modern Pharmacology Certificate course is launched by state government of Maharashtra. Only problem is of cross-pathy practice.

From results it is clear that in the post-test, homeopathic doctors have scored very good marks as compare to the pre-test. Difference of marks between pre-test and post-test ranges from 1 mark to 14 marks!! Definitely this course help the student of homeopathy to diagnose and treat the patient by allopathic system of medicine. Majority of the homeopathy student admitted that they were using irrational drug therapy, before knowing this course. Irrational use of antimicrobial agents, incomplete dosing schedule, unnecessary steroid therapy, hazardous use of IV fluids, etc. were few examples of it. Casual use of steroids for simple common cold, asthma (grade I and II), simple inflammation, simple fevers to life threatening infections, are quite common. This might be the reason for the rising rate of diabetes mellitus, tuberculosis, renal failure, congenital anomalies, etc in the rural population. Because always there is "Nim Hakim Khatre Jaan" means incomplete knowledge of medicine always endanger the life of patient. Now detail knowledge of pharmacology and other subjects give all students a boost of confidence. These students in their future can collect detail knowledge about any drug or disease as their terminologies and basics are cleared during this course.

Conclusion

Comprehensive teaching and learning of homeopathic students can improve their clinical practice of allopathic system of medicine. This will definitely minimize the incidence of adverse drug reactions, iatrogenic diseases, drug induced diseases in rural physically hard working population.

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