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Knowledge, attitude, practice, and beliefs about drug proving in students of Homoeopathy

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ABSTRACT

Background and Aim: Students in homoeopathic colleges are often encouraged to participate in drug proving programs. There is no valid and reliable instrument for identifying their concerns. Therefore, an instrument has been designed and tested to identify knowledge, attitude, practice, and beliefs (KAPB) of homoeopathic students. This can be used for motivating students to participate in drug proving programs.

Design and Methods: First, the questionnaire items were identified by a telephonic interview with investigators of drug proving program. The questionnaire was pilot tested on interns of a homoeopathic college to identify its internal consistency, test-retest reliability, and face and construct validity. A survey using this instrument followed by training of homoeopathic medical students was conducted, and the change in KAPB was also assessed.

Results: A questionnaire of 28 questions testing knowledge, beliefs, attitudes and practices was developed with Cronbach's α =0.71 for the entire scale. Students were of the opinion that with participation in proving studies, homoeopathic Materia Medica will develop, which will be their contribution to Homoeopathy. Students will be personally benefitted by having an experiential knowledge rather than theoretical knowledge of philosophy. Although the majority is aware that proving does not cause long-term damage to health, nor does it cause irreversible pathological change, a major concern is the development of severe or unmanageable symptoms. Students can be motivated to participate in proving programs by re-enforcing that it will be a unique experience, assuring them about that no acute unmanageable symptoms are likely to develop.

Keywords: Attitude, Drug proving, Homoeopathic students, Knowledge, Practice, Reliability, Validity

INTRODUCTION

Homoeopathic drug proving program (or Homoeopathic Pathogenetic Trial) is essential and fundamental for the development of materia medica of new drugs and validating the existing information. Most proving trials

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are done in homoeopathic teaching or research centers with students or sympathizers of Homoeopathy as volunteers[1] under the supervision of research scientists/faculties.

In India, in undergraduate curriculum prescribed by the Central Council of Homoeopathy the students are taught about drug proving under the subjects Organon of Medicine and Principles of Homoeopathy, Pharmacy, and Materia Medica.[2] Central Council for Research in Homoeopathy (CCRH) conducts drug proving on standardized protocols.[3-5] Till date, Council has conducted proving of 98 drugs.[6] Proving studies are mostly conducted in collaboration with homoeopathic colleges where scientists from the Council and teachers from the colleges, encourage students to participate.

Although homoeopathic physicians and students are considered to be the best provers,[7] there are ethical concerns in involving students into any research program,[8] which includes obtaining their written informed consent voluntarily to participate as provers. Over the years, it has been identified that students do not come up proactively to participate in drug proving. Motivational sessions and training programs are required to encourage students. However, for these programs to be effective, it is essential that they bridge the knowledge gap, remove myths, and address specific concerns and apprehensions of students. For this, knowledge, attitudes, practices, and beliefs (KAPB) of students about drug proving is desirable.

One study has been conducted in the past to identify the KAPB of students and interns in homoeopathic college about the drug proving programs.[9] No standardized questionnaire used in the study. Therefore, firstly an instrument was developed, tested, and validated. Thereafter, it was used in to identify KAPB and detect a change in KAPB of students following a training session.

STUDY 1: QUESTIONNAIRE DEVELOPMENT

Study 1 was conducted to develop a KAPB questionnaire.

Method

Participants

Proving masters of CCRH conducting drug proving program (2013–2014).

Procedure

A telephonic interview was undertaken with seven proving masters. They were asked three questions:

- What questions do students commonly ask when they are approached for enrolment?
- What are the common reasons provers often cite for not being interested?
- What do the investigators tell the students to encourage them for enrolment?

The responses of the proving masters were listed. The responses were assessed to develop individual items of the questionnaire, under the four domains. These items formed one part of the questionnaire. Questions to compile demographic data and experience with proving were added.

Result

In response to the 3 questions, 44 responses were generated. Out of these, 15 responses to the questions asked by students and common reasons of not being interested were on personal health concerns such as, "if any long lasting or serious symptoms develop during proving." The provers also ask about the "drug that would be given to them during proving." Since studies are double-blind studies, the investigators themselves are not aware of the drug substance, which would be given to the provers. Students also frequently ask about "procedure of the study and incentives that they would be given to participate in proving and time that they will have to devote to drug proving in terms of duration and frequency of visits to the proving masters."

Reasons for dropouts identified were fear of undergoing investigations, concerns by family members, and personal illness. Proving masters usually inform students that the symptoms will be mild in nature, and antidotes or appropriate treatment will be given if need be, when motivating them for proving.

Based on the responses received, 30-item KAPB questionnaire consisting of 10 on knowledge, 10 about beliefs, 5 each on attitudes, and practices was developed. Response option of definitely true, probably true, probably false, definitely false, and do not know was kept. Both positive and negative questions were included to maintain a balance and reduce unidirectional responses.

STUDY 2: PILOT TESTING OF QUESTIONNAIRE

The questionnaire was pilot tested to identify its internal consistency, test-retest reliability, and face and construct validity.

Method

Participants

Homoeopathic bachelor degree students in their internship year (interns) of Nehru Homoeopathic Medical College and Hospital, Delhi.

Procedure

Reliability study

Forty-four (44) interns consented to participate after they were explained about the purpose of the study. Written informed consent was taken from all participants. The participants were asked to fill in the questionnaire completely to the best of their ability. At the end of the test, participants were requested not to discuss the questionnaire and their responses with others, until the re-test part has been completed. This was done to ensure that in re-test, individual responses of the participants are obtained and not of the group. Re-test was conducted after a gap of three days. Thirty-six interns (36) reported for re-test. Written informed consent was taken from all participants again, and the same questionnaire was applied.

Validation study

Interns who had participated in the re-test were invited for focus group discussion. Two independent focus group discussions were conducted simultaneously by the research team, in separate halls by (AK, SS and DT, GM). It was discussed if the questionnaire covers all aspects of concerns that the students/interns can have about drug proving. Opinions of the interns about the questionnaire, problem areas in terms of difficulty faced in understanding of questions, clarity of questions, familiarity or unfamiliarity with questions, problems while filing the questionnaire and any feedback related to questions, scale adopted for evaluation, and queries related to the questionnaire were assessed.

Statistical Analysis

The data were tabulated electronically in Microsoft Excel and analyzed by using the software IBM SPSS 20.0 version (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp). The demographical details of the participants were expressed in frequency and percentage [Table 1]. Internal consistency was calculated using Cronbach's coefficient alpha (α) for the four domains (KAPB) and total score. Intra-class coefficients for each item and total score were estimated to assess test-retest reliability.

Results

Demographic data

Of the 44 interns who participated in the test study, there were 36 (81.8%) females and 8 (18.2%) males. Only 23 students had participated in the drug proving program, 21 had no experience. Twenty-five (25) interns confirmed that they had interacted with provers about the drug proving, whereas 19 had not interacted with any provers. There were multiple responses to the source of information; 31 said that they learnt from their teachers only, where remaining learnt from varied sources that include teachers, peers and earlier provers [Table 1].

Reliability

The Cronbach's α for the five parameters of the KAPB and the total is given in Table 2. According to the rule of thumb[10] Cronbach's α ($\alpha = 0.71$, $p = 0.001$) was acceptable for the questionnaire.

Test-re-test reliability calculated for individual items was statistically significant for 24 questions [Table 3]. Of the 44 interns, only 36 (81.8%) completed re-test. As such the data pertains to only 36 participants.

Table 1: Demographic data

	n (%)
Age (years)	
21-25	38 (86.4)
More than 25	6 (13.6)
Male	8 (18.2)
Female	36 (81.8)
Participated in drug proving program	
Yes	23 (52.3)
No	21 (47.7)
Interacted with other provers	
Yes	25 (86.4)
No	19 (43.2)
Source of information about proving	
Only teachers	31 (70.5)
Only peers	4 (9.1)
Only provers	1 (2.3)
Both teachers and peers	2 (4.5)
Both teachers and other provers	4 (9.1)
Teachers, peers, and other provers	2 (4.5)

Table 2: Internal consistency

Items	Cronbach's α	Mean	SD	Variance	ICC	95% CI	*P*
Item 1-10	0.53	26.8	5.2	26.8	0.10	0.4 to 0.2	0.001
Item 11-20	0.54	28.6	5.1	26.4	0.11	0.4 to 0.2	0.004
Item 21-25	0.37	14.5	3.0	8.9	0.11	0.05 to 0.25	0.019
Item 26-30	0.51	9.4	2.9	8.8	0.17	0.06 to 0.32	0.001
Item 1-30	0.71	79.4	11.1	122.3	0.07	0.04 to 0.13	0.001

ICC: Intra class correlation; CI: Confidence interval; SD: Standard deviation

Table 3: Test-retest reliability

Parameters	Items	Questions	ICC	95% CI		*P*
				Lower bound	Upper bound	
Knowledge	Q1	Drug proving can be done on humans both sick or healthy	0.588	0.325	0.766	0.000
	Q2	Symptoms produced during drug proving are transient	0.240	−0.092	0.524	0.076*
	Q3	A homoeopath is the best prover	0.448	0.145	0.675	0.003
	Q4	Drug proving and phase I trials are the same	0.328	0.004	0.590	0.024
	Q5	Drug proving does not require ethical clearance	0.255	−0.075	0.536	0.064*
	Q6	Drug proving brings in finer symptoms of materia medica which cannot come in with toxicological studies of drugs	0.689	0.469	0.828	0.000
	Q7	Crude drugs are used for drug proving	0.575	0.308	0.758	0.000
	Q8	There are no antidotes/treatments for symptoms appearing during proving	0.279	−0.50	0.553	0.047
	Q9	Drugs are proved in potencies	0.542	0.264	0.737	0.000
	Q10	Drug proving improves the knowledge of students about Homoeopathy	−0.022	−0.344	0.305	0.551*
Beliefs	Q11	Drug proving can cause irreversible pathological changes	0.522	0.238	0.724	0.000
	Q12	Drug proving can cause long-term damage to the health of the person	0.478	0.181	0.695	0.001
	Q13	Provers need not make many changes in his/her diet and routine during proving	0.750	0.582	0.864	0.000
	Q14	Drug proving improves the immunity of the prover	0.835	0.700	0.912	0.000
	Q15	A prover is not permitted to take any other emergency medicine/ treatment during drug proving	0.780	0.579	0.870	0.000
	Q16	Drug proving will cause old diseases/symptoms to re-appear	0.536	0.256	0.733	0.000
	Q17	A prover may develop severe unmanageable symptoms	0.039	−0.289	0.359	0.408*
	Q18	Proving causes interference in the concentration of provers and hampers their studies	0.517	0.232	0.721	0.001
	Q19	Natural life cycles get disturbed during proving	0.671	0.443	0.818	0.000
	Q20	Homoeopathic students have a moral obligation to participate in proving	0.338	0.015	0.597	0.021
Attitudes	Q21	Drug proving is not needed anymore since the provings of drugs are already complete	0.119	−0.213	0.427	0.241*
	Q22	No new drugs are needed to be included in Homoeopathy	0.246	−0.085	0.529	0.071*
	Q23	Provers must divulge the most personal details and life situations during proving	0.512	0224	0.717	0.001
	Q24	Drug proving on healthy humans is ethical	0.479	0.182	0.695	0.001
	Q25	Drug proving is a very long process	0.304	0.023	0.572	0.034
Practices	Q26	A prover is bound to report to the proving master on a fixed schedule	0.730	0.531	0.853	0.000
	Q27	Confidentiality of the prover is maintained during drug proving process	0.333	0.009	0.593	0.022
	Q28	Drug proving is done only after informed consent of the volunteer	0.521	0.236	0.723	0.000
	Q29	Provers can share the information with other provers in terms of appearance of symptoms during the drug proving process	0.569	0.300	0.754	0.000
	Q30	A prover can withdraw voluntarily from the drug proving at any time	0.643	0.402	0.800	0.000

*Statistically not significant. ICC: Intra class correlation; CI: Confidence interval

Focus group response and changes made in the questionnaire

Coverage of concerns about drug proving

Concerns were raised about the intensity and duration of symptoms appearing during drug proving. They were also not sure if proving process permits the use of any medicines in case of emergency. The question items were covering most of these aspects. The opinion of students varied if drug proving improves immunity. Since there are no available studies on the effect of proving on immune parameters, the question "if proving raises immunity" was deleted.

In response to the question, if drug proving improves knowledge of Materia Medica, some students were of the opinion that although students can become more aware of symptoms that they develop, there is no actual improvement in knowledge of materia medica until they come to know of the drug that they have proved and symptoms that have appeared for that particular agent in proving study.

Difficulty faced in understanding of the questions

The difference between ethics and morals is not clear. As such it is difficult to answer the question if drug proving is ethical or not and if students have a moral obligation to participate in drug proving. The students were not familiar with the term ethics and ethical committees. As such the question was deleted.

The question drug proving process is a long process is not a specific question and both the terms "process" and "long" add to the ambiguity. It is not clear if long means 6 months or 1 year and for whom. If the entire process of deciding on the drug to be proved, to identification and enrolment of provers, giving the drug to provers to the compilation of data and publishing it is concerned, then it is a long process. If only drug intake by provers is concerned, then it is not a long process. The question that proving is a long process was modified and the frame of reference to prover was added, i.e. for a prover, proving is a long process.

Familiarity or unfamiliarity with the questions

The interns though familiar with the term phase I trial were not clear about purpose and process of a phase I trial. Although most of them were of the opinion that the process of drug proving is different from phase I trials, they were not clear about the difference between the two.

Change in questionnaire

Two questions were deleted. Slight modification in language was made for 2 questions. The Cronbach's alpha for the questionnaire after deleting 2 questions was also 0.71 and was found to be acceptable.

Scale adopted for evaluation

The scale used "definitely" and "probably," caused confusion to the interns. The response options could be specific as "yes" or "no" and or can be quantifiable. With probable being a response option, it adds to the confusion that the interns already have about the issues. The scale used was therefore modified.

Instrument Developed

A KAPB questionnaire was developed consisting of three parts:

First part contains demographic data, participation in a drug proving program and source of receiving information about drug proving.

Part two of the questionnaire consists of 28 KAPB Questions, 9 questions on knowledge, 9 on beliefs, 5 on attitudes, and 5 on practices. The questions comprise of 5 options, with scoring system used as: 5 = strongly agree with the statement, 4 = agree, 3 = neutral, 2 = disagree, and 1= strongly disagree with the statement. To avoid bias both positive and negative statements are included. The scores of negative statements are to be reversed while calculating the total score. All items are to be scored so that high scores reflect high knowledge, positive attitudes, correct beliefs, and positive practices toward drug proving.

Third part had questions to identify motivators and de-motivators for participation in drug proving studies and yes/no response to the willingness of the students to participate in proving studies.

STUDY 3: KNOWLEDGE, ATTITUDE, PRACTICE AND BELIEFS SURVEY

A survey was conducted to identify KAPB of students about drug proving. The survey was repeated to identify a change in KAPB after a training session for students.

Method

Participants

Graduation students on ANSS Homoeopathic Medical and Hospital (ANSSHMH), Kottayam.

Procedure

In a seminar on drug proving at Central Research Institute of Homoeopathy, Kottayam for the students of ANSSHMH, printed questionnaire and voluntary informed consent were distributed. The survey was conducted before the seminar. The students were given 15 minutes to fill in the questionnaire and return them to the research team. Immediately at the end of the seminar, the questionnaires were again distributed and were returned by students after 15 minutes.

Statistical method

The data were tabulated electronically using Microsoft Excel and analyzed by using the software IBM SPSS 20.0 version. The demographical details of the participants were expressed in frequency and percentage [Table 4]. Means and standard deviations were calculated for KAPB items and for complete scale. The items left blank by respondents (missing data) were put in as zero when calculating scores, i.e., scale score represent the average for all items in the scale answered or not answered. Total scores and scores for subscales on KAPB scores were compared before and after the training intervention. Paired *t*-test was used to compare mean scores.

Qualitative data were analyzed to identify motivators and de-motivators of the students for participation in drug proving programs.

Results

Pre-training and post-training assessments were filled by 122 participants present at the seminar.

Demographic Data [Table 4]

Of 122 students, most (63.11%) were students of the 1st year in the age group of 18–20 years. Percentage of female students far exceeded the male students. Only 8 students had participated in a drug proving program, as compared to 114 with no experience. However, 34 students responded that they have interacted with provers about drug proving, whereas 88 had not interacted with any provers. There were multiple responses to the source of information about the drug proving program. Teachers are the main source of information followed by peers.

Change in mean scores before and after training

There was a statistically significant increase in mean scores after the training [Table 5]. Change in individual items was also identified [Table 6].

DISCUSSION

This is a first study conducted on a standardized questionnaire to identify KAPB of students about drug proving. The reliability of the questionnaire was confirmed using measures of internal consistency and test-retest and validity was examined. The questionnaire was identified to have an acceptable level of face and construct validity based on the focus group opinion generated by the interns. The scale was able to identify knowledge, attitudes, beliefs, and practices of students and change in KAPB scores before and after training.

Table 4: Demographic data

	n (%)
Age (years)	
18-20	77 (63.1)
21-23	40 (32.8)
24-26	4 (3.3)
No response	1 (0.8)
Male	9 (7.4)
Female	112 (91.8)
No response	1 (0.8)
Year of education (years)	
I	73 (59.8)
II	25 (20.5)
III	8 (6.6)
IV	16 (13.1)
Prior knowledge/experience of drug proving	
Yes	34 (27.86)
No	88 (72.13)
Source of information about proving*	
Teachers	106
Peers	37
Other provers	7

*Multiple responses were received

Table 5: Mean total score of participants before and after the training (*n*=122)

Scores	Pre-training		Post-training		*P*
	Mean score	SD	Mean	SD	
Total score	101.90	8.39	106.09	8.37	0.000
Knowledge	36.83	4.95	38.66	4.04	0.058
Beliefs	31.33	3.88	30.55	4.32	0.000
Attitudes	16.86	2.98	18.34	2.65	0.000
Practices	16.86	2.27	18.53	8.37	0.000

SD: Standard deviation

Table 6: Change in individual items means pre- and post-training

Question	Mean pre-training scores	Mean post-training score	*P*
Drug proving is done only on apparently healthy individuals	4.27	4.60	0.013
Symptoms produced during drug proving are transient	3.93	4.29	0.004
A homoeopath is the best prover	4.60	4.65	0.534
Drug proving and phase I trials (safety studies conducted on healthy individuals in allopathy) are the same	3.68	3.85	0.256
Drug proving brings in finer symptoms of materia medica which cannot come in with toxicological studies of drugs	3.52	3.84	0.014
Crude drugs are used for drug proving	4.24	4.26	0.803
There are no antidotes for symptoms appearing during proving	3.83	3.78	0.647
Drugs are proved in potencies	4.17	4.63	0.000
Drug proving improves the knowledge of students about Homoeopathy	4.60	4.77	0.032
Drug proving causes irreversible pathological changes	4.44	4.64	0.074
Drug proving causes long-term damage to the health of the person	4.73	4.76	0.630
A prover does not have to make many changes in his/her diet and routine during proving	2.52	2.11	0.005
A prover is not permitted to take treatment during drug proving, even in an emergency	3.73	3.70	0.805
Drug proving will cause old diseases/symptoms to re-appear	3.29	2.80	0.000
A prover develops severe unmanageable symptoms	3.90	4.09	0.064
Proving causes interference in the concentration of provers and hampers their studies	3.51	3.52	0.942
Natural life cycles get disturbed during proving	3.11	3.27	0.211
Homoeopathic students have a moral obligation to participate in proving	2.11	1.66	0.000
Drug proving is not needed anymore, since the provings of drugs are already complete	4.10	4.43	0.008
No new drugs are needed to be included in Homoeopathy	4.44	4.48	0.594
Provers must divulge the most personal details and life situations during proving	2.20	2.15	0.686
Drug proving on humans is approved by ethical committee	3.57	4.42	0.000
For a prover, drug proving is a very long process	2.55	2.87	0.005
A prover is bound to report to the proving master on a fixed schedule	1.53	1.52	0.924
Confidentiality of the prover is maintained during drug proving process	4.25	4.44	0.008
Drug proving is done only after informed consent of the volunteer	4.26	4.53	0.001
Provers should not share the information with other provers in terms of appearance of symptoms during the drug proving process	3.88	4.12	0.108
A prover can withdraw voluntarily from the drug proving at any time	2.95	3.91	0.000

A major concern of the students for participation in a program is the development of symptoms [Table 7]. The test-retest reliability for the questions "Symptoms produced during drug proving are transient" and "A prover may develop severe unmanageable symptoms" was not significant. The KAPB survey identified that students have a fear of developing severe symptoms or unmanageable symptoms. After the training, a significant increase in the score was seen in response to the question that symptoms produced during drug proving are transient. However, the response to the question that drug proving causes old symptoms to appear reduced. No change was seen in response to the questions that prover can develop severe unmanageable symptoms, proving causes interference in concentration and natural life cycles get disturbed during proving. In the survey, 31 students were worried about adverse changes in the health that drug proving can possibly cause. Only eight students had mentioned that the overall health will improve after participation in drug proving [Table 7]. However, overall scores indicate that students are aware that proving does not cause long-term damage to health of a person, nor does it cause irreversible pathological change.

It was identified that students have a good theoretical knowledge, but lack practical aspects. The knowledge and the beliefs that the students develop about drug proving are primarily influenced by teachers. Very few students have had actual interactions with prior provers and therefore, actual experience does not translate into knowledge that students gather. This is reflected in low scores of students in response to questions such as "A

Table 7: Key motivators and de-motivators identified

Key motivators for participation identified	Key de-motivators to participation identified
More drugs can be identified	Lack of sufficient knowledge about proving process
Materia Medica can be developed	Changes can happen in normal body state
Contribute to Homoeopathy	Afraid/fear of symptoms, development of severe symptoms, unmanageable symptoms
More diseases can be cured	No side effect is not assured
It is important for humanity	Will interrupt studies/affect concentration power
Duty of the students	Will hamper day to day routine
Physician is the best prover	Would not like to test medicines on my body
Can feel and understand symptoms	Effect of medicine cannot be predicted
Get experience on practical aspects of drug proving/see effects of medicines	Not interested in proving
Knowledge of Homoeopathy increases	Parents are not agreeing
Knowledge of medicines increases	Don't know if I am fit for proving
Useful for practice/increase confidence for practice	
Increase immunity/improves health	

prover is bound to report to the proving master on a fixed schedule," "Provers must divulge the most personal details and life situations during proving," "A prover can withdraw voluntarily from the drug proving at any time." Some of these improved after the seminar. Although, for research studies, prover needs to report to the proving master as per schedule, enough leverage is available within the protocol, to ensure that the routine of the prover is not disturbed. The provers can withdraw voluntarily from proving at any time. The prover needs to be detailed about the procedures followed in the study. Interactions with those persons who have participated in proving studies before can also possibly reduce these misconceptions.

Students who are potential provers are also not aware of management of symptoms. The scores to the question that prover is not permitted to take treatment during drug proving even in an emergency did not have any change after the training. The provers need to be assured about the management of side effects if any and of use of medicines in case of emergency as is identified in the proving studies.

Low scores were seen in response to the question that provers have a moral obligation to participate in drug proving. Even though homoeopathic physicians are the best provers, participation in research studies should necessarily be voluntary and should not be under any moral obligation. The training programs must specifically address this issue. It is strongly suggested issues related to morals and ethics must be discussed with the students, prior to initiation of proving trials.

In the survey, 29 students were of the opinion that the homoeopathic Materia Medica will develop, and participation in drug proving will be their contribution to Homoeopathy [Table 7]. With participation in proving students will be personally benefitted by having a better knowledge of medicines or by having an experiential knowledge rather than theoretical knowledge associated with homoeopathic philosophy. Proving studies bring in finer symptoms of materia medica, which the students can appreciate better if they have experienced some symptoms themselves. The scores were high in response to the question that drug proving improves knowledge of students about Homoeopathy.

This 28-item tool assesses KAPB of students of Homoeopathy regarding drug proving. The survey instrument can be used independently to identify the student perspective about drug proving. It can also be used in addition to a drug proving enrolment motivation program to assess change in the student perspectives after the motivation programs. Reprint of the questionnaire developed can be requested from the authors.

Limitations

It is presumed that the students have a basic understanding of the philosophy of Homoeopathy and principles of drug proving. As such the questionnaire can only be used for homoeopathic students and practitioners. It cannot be used for the general public while inviting them into drug proving programs.

Since the internal consistency of subscale items is <0.70, it is suggested that the scale is used in totality and individual subscales are not used until the scale is further developed and the internal consistency of subscale items increases.

The scale used in the study is in the process of development. This is the first survey study conducted using this questionnaire. More studies of similar nature are required to develop the scale fully.

CONCLUSION

Students can be motivated to participate in proving studies by re-enforcing that drug proving will bring in experiential knowledge, rather than theoretical

knowledge of homoeopathic philosophy. At the same time, fear of developing severe symptoms needs to be allayed. Colleges should conduct drug proving so that students can practically experience the process and are more aware of the practical aspects of proving studies.

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Conflicts of Interest

There are no conflicts of interest.

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होम्यापैथी के विद्यार्थियों में औषधि की सत्यता सिद्ध करने के लिए उनके ज्ञान, दृष्टिकोण, अभ्यास और विश्वास पर आधारित प्रश्न सूची का निर्माण/विकास

पृष्ठभूमि और लक्ष्य: होम्योपैथिक महाविद्यालयों में विद्यार्थियों को औषध प्रमाणन कार्यक्रमों में भाग लेने के लिए प्रायः प्रोत्साहित किया जाता है। उनकी प्रतिबद्धता की पहचान करने के लिए कोई वैध और विश्वसनीय साधन नहीं है। इसीलिए, होम्योपैथिक विद्यार्थियों के ज्ञान, दृष्टिकोण, अभ्यास और विश्वास की पहचान के लिए एक साधन की रचना की गई और उसका परीक्षण किया गया। इसे औषधि की सत्यता सिद्धि कार्यक्रमों में भाग लेने के लिए विद्यार्थियों को अभिप्रेरित करने के लिए उपयोग में लाया जा सकता है।

संरचना और प्रविधियाँ: सर्वप्रथम औषध प्रमाणन सिद्धि कार्यक्रम के अन्वेषकों से दूरभाष पर साक्षात्कार के आधार पर प्रश्नसूची के निर्माण हेतु वस्तुनिष्ठों की पहचान की गई। आंतरिक सुसंगतता, परीक्षण–पुनः परीक्षण विश्वसनीयता और सम्मुख तथा संयोजनात्मक वैधता की पहचान के लिए प्रश्नावली का प्रायोगिक परीक्षण होम्योपैथी महाविद्यालय के प्रशिक्षुओं पर किया गया। होम्योपैथिक चिकित्सा विद्यार्थियों पर प्रशिक्षण के पश्चात इस साधन का उपयोग करते हुए एक सर्वेक्षण किया गया और उनके ज्ञान, दृष्टिकोण, अभ्यास और विश्वास में परिवर्तन का मापन किया गया।

परिणाम: 28 प्रश्नों की एक प्रश्नावली, जिसमें ज्ञान, दृष्टिकोण, अभ्यास और विश्वास का परीक्षण किया जाना था विकसित की गयी, जिसमें सम्पूर्ण मापनी का क्रोनबैक अल्फा 0.71 है। विद्यार्थियों की राय थी की इस तरह औषध प्रमाणनअध्ययनों में भागीदारी से होम्योपैथिक मेटेरिया मेडिका का विकास होगा जो कि होम्योपैथी में उनका योगदान होगा। विद्यार्थियों को सैद्धांतिक ज्ञान की अपेक्षा अनुभवजन्य ज्ञान होगा जिससे कि उन्हें व्यक्तिगत लाभ होगा। हालांकि अधिकांशतः ये बात जानते है कि औषध प्रमाणन परीक्षण से स्वास्थ्य पर न तो दूरगामी क्षति पहुंचती है न ही इसके कारण कोई स्थायी विकृतिजन्य परिवर्तन होता है जो आजीवन रहे, एक प्रमुख चिंता घातक या अप्रबंधनीय लक्षणों की उत्पत्ति होने को लेकर होती है। विद्यार्थियों को औषध प्रमाणन कार्यक्रमों में भागीदारी करने के लिये प्रोत्साहन करने हेतु इस बात पर ज़ोर देते हुए कि यह एक अनोखा अनुभव होगा, उन्हें निश्चिन्त किया जाना चाहिए कि कोई भी तीव्र असहनीय लक्षण उत्पन्न नही होंगे।

Desarrollo de un cuestionario sobre los conocimientos, la actitud, la práctica y la idea que tienen los estudiantes de homeopatía en cuanto a las drqgas patogenesias

RESUMEN

Fundamento y objetivos: Con frecuencia, se solicita que los estudiantes en las facultades homeopáticas participen en programas de patogenesias de remedios homeopáticos. No se dispone de instrumentos válidos y fiables para identificar su postura al respecto. Por ello, se ha diseñado y examinado un instrumento para identificar el conocimiento, la actitud, la práctica y la idea (CAPI) de los estudiantes homeopáticos. Dicho instrumento se puede utilizar para motivar a los estudiantes a participar en los programas de patogenesias.

Diseño y métodos: En primer lugar, los investigadores del programa de patogenesias realizaron entrevistas telefónicas para identificar los ítems que se incluyen en el cuestionario. Dicho cuestionario piloto se planteó a los internos de una facultad de homeopatía para identificar la homogeneidad interna, la fiabilidad de "test-retest" y la validez de aspecto y concepto. A continuación, se efectuó un ensayo utilizando este instrumento seguido de la formación de los estudiantes de medicina homeopática, evaluando además el cambio en su CAPI.

Resultados: Se desarrolló un cuestionario de 28 preguntas para examinar el conocimiento, la idea, la actitud y la práctica, mediante la α de Cronbach = 0,71 para toda la escala. Los estudiantes eran de la opinión de que, gracias a su participación en los estudios de patogenesias, se ampliaría la materia médica, lo que significaría su contribución a la homeopatía. Los propios estudiantes se beneficiarían por adquirir un conocimiento experimental más que uno teórico conocimiento de la filosofía. Pese a que la mayoría de ellos era consciente de que la patogenesia no puede causar efectos nocivos a largo plazo en la salud, ni provocar cambios patológicos irreversibles, una de sus preocupaciones principales era el desarrollo de síntomas graves o inmanejable. Es posible motivar a los estudiantes a participar en las patogenesias haciendo hincapié en que se trata de una experiencia única, y garantizándoles de que no es probable que se desarrollen síntomas agudos inmanejable.