

Knowledge, Attitude and Practices of teacher trainees about health-related topics during Teacher's training course - A cross-sectional study

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Abstract

Introduction: A teacher is a person who educates others and is considered a role model to transmit the value of life. School is considered an important setting for comprehensive health promotion. Teachers can act as a bridge to pass health information and behaviour that they learn to students, families, and Communities. The major pivot in the present study is to assess the teacher's trainees about health knowledge, attitude, and practices during their training course.

Objectives: To assess the knowledge, attitude, and practice of health-related topics in teacher's training course

Materials and methods: A cross-sectional study was carried out in the B Ed and D Ed colleges of field practice area with a sample size was 150. It was a questionnaire-based study. Information was collected based on the interview method.

Results: Knowledge and practice were better in B Ed trainees. The attitude of the trainees is nearly equal.

Conclusions: The disparity is majorly based on their previous educational status. Those who have opted for B Ed have passed degrees like B.SC or B.A and trainees doing D Ed have joined immediately after the completion of their 12th standard. Hence, their knowledge of health-related topics is limited compared to B Ed trainees

Keywords: teacher, education, trainees, health

Introduction

Teachers are considered role models to transmit the value of life. Being an essential member of the school, it is the responsibility of teachers to inculcate healthy habits amongst children, thereby making the future generation of the community healthy.^[1]

Schools are important settings for comprehensive health promotion as they exert the most influence on the lives of children and adolescents. They are designed to influence and promote cognitive development and behavioural change. High-level knowledge and positive attitude and practice have favored the health promotion environment. Health Education provided by teachers may have an immediate effect on students and continue to influence students' behaviour and adulthood.^[2]

Schools are identified as key settings for health

promotion and health education. The school-age comprises a high proportion of the population of each country (WHO 1992). Health Knowledge, Attitude, and Practice (KAP) can be transferred easily in the process of education and training in schools. Teachers can act as a bridge to pass health information and behaviour that they learn to students, families, and Communities.^[3]

The participation of school teachers in an emergency situation is fundamental to providing appropriate care to an injured child.^[4]

Education has always been a powerful agency in any society and it is considered an indispensable instrument for bringing positive change in the health, social, political, economic, and cultural life of people. The whole process is shaped by many important agents, and the teacher is one of them. The teacher is

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claimed to play a central role in education.^[5]

The crux of the entire process of teacher education lies in its curriculum, design, structure, organization, and transaction modes, as well as the extent of its appropriateness^[6]

The needs and requirements of students and education vary at each level. Teacher education also helps in the development of teaching skills in teachers of professional institutions. The teacher is required to acquire adequate knowledge, skills, interests, and attitudes towards the teaching profession.^[7]

Hence this pioneering study was conducted on teacher trainees, to know their knowledge, attitude, and practice towards health-topics and how effectively they disseminate the same to students after their course completion.

Objective: To assess the knowledge, attitude, and practice of health-related topics in teacher's training course

Material and methods

A cross-sectional study was carried out in the Bachelor of Education (B.Ed) and Diploma of Education (D.Ed) training colleges of the field practice area. A purposive sampling design was used. Total trainees present on the day of data collection and were consenting to take part in the study were 150, of which 50 B.Ed and 100 D.Ed trainees. It was a questionnaire-based study; data was collected by interview method and entered in Microsoft Excel. The data were analyzed using Microsoft excel. Descriptive statistics like percentages were used to assess the knowledge, attitude, and practices of health-related topics in the study. To compare B.Ed and D.Ed trainees Z-test for proportions is used, and a p-value of < 0.05 is considered statistically significant.

Results:

Table 1: Gender profile in the study

Gender	D.Ed	B.Ed	Total
Male	31 (62%)	62 (62%)	93 (62%)
Female	19 (38%)	38 (38%)	57 (38%)
Total	50 (33%)	100 (67%)	150 (100%)

In the study, 50 (33%) D.Ed and 100 (67%) B.Ed trainees agreed to participate. The D.Ed trainees were aged between 17-21 years and the B.Ed trainees were between 22-29 years. Among them 62% were males and 38% were females.

Table 1.a: Knowledge of the D.Ed course trainees

Knowledge-based aspects	Present n (%)	Not present n (%)
Knowledge about common topics like HIV, TB, and other environmental factors like Ozone	38 (76%)	12 (24%)
Knowledge of first aid	30 (60%)	20 (40%)
Knowledge of Computers usage regarding the health issues	32 (64%)	18 (36%)
Language proficiency (Kannada & English)	40 (80%)	10 (20%)
Good teaching practices Both theory & practical	40 (80%)	10 (20%)

In 38 (76%) people had good knowledge about common topics like HIV, TB, and Ozone. The effects of ozone depletion and its hazardous effect on health. 20 (40%) subjects had no idea regarding first aid. Computer knowledge was good among 32 (64%) trainees. 40 (80%) were proficient in both Kannada and English while the remaining had knowledge of only one language. Amongst the trainees, 40 (80%) said that the teaching methods in college both theory and practice were good while the remaining 10 (20%) said there was scope for improvement.

Table 1.b: Attitude among D.Ed course trainees

Attitude based aspects	Present n (%)	Not present n (%)
Attitude to pay special attention to disabled students and identify mental health issues	46 (92%)	4 (8%)
Attitude to handle mischievous students	31 (62%)	19 (38%)
Attitude to handle students who were long term absentees based on health issues	38 (76%)	12 (24%)
Interest in extracurricular activities	44(88%)	6(12%)
Influence from teachers or any family members to become a teacher	20 (40%)	30 (60%)

In 46 (92%) said they would pay special attention to students with disabilities and mental health issues. To handle mischievous students, 31 (62%) said they would correct them and talk to them rather than punish

them. 38 (76%) said they would enquire about long-term absentees and talk to them while the remaining resorted to punishment. 44 (88%) had an interest in extracurricular activities. 40% of trainees influenced teachers and family members to become a teacher.

Table 1.c: Practice amongst the D.Ed course trainees

Practice-based aspects	Present n (%)	Not present n (%)
Response to finding illness in students	45 (90%)	5 (10%)
Etiquette training in college	5 (10%)	45 (90%)
Interest to take private tuition	35 (70%)	15 (30%)
Advantages of this course over others	10 (20%)	40 (80%)

In 45 (90%) had a good response about identifying illness in students as early as possible. Only 5 (10%) study subjects said there was etiquette training in this college. 35 (70%) trainees had an idea about taking tuitions. 10 (20%) of them said that there was a distinct advantage of this course over others.

Table 2.a: Knowledge of the B.Ed course trainees

Knowledge-based aspects (n=100)	Present (%)	Not present (%)
Knowledge about common topics like HIV, TB, and other environmental factors like Ozone	94	6
Knowledge of first aid	90	10
Knowledge of Computers usage regarding the health issues	65	35
Language proficiency (Kannada & English)	82	18
Good teaching practices Both theory & practical	86	14

Among 100 B Ed trainees, 94% of people had good knowledge about common topics like HIV, TB, and Ozone. The effects of ozone depletion and its hazardous effect on health. 90% of subjects had an idea about first aid. Computer knowledge was good among 65% of trainees. 82% were proficient in both Kannada and English while the remaining had knowledge of only one language. Amongst the trainees, 86% said that the teaching methods in college both theory and practice were good while the remaining 14% said there was scope for improvement.

Table 2.b: Attitude among B.Ed course trainees

Attitude based aspects (n=100)	Present (%)	Not present (%)
Attitude to pay special attention to disabled students and identify mental health issues	95	5
Attitude to handle mischievous students	66	14
Attitude to handle students who were long term absentees based on health issues	84	16
Interest in extracurricular activities	88	12
Influence from teachers or any family members to become a teacher	55	45

Around 95% said they would pay special attention to students with disabilities and mental health issues. To handle mischievous students, 66% said they would correct them and talk to them rather than punish them. 84% said they would enquire about long-term absentees and talk to them while the remaining resorted to punishment. 88% had an interest in extracurricular activities. 55% of trainees influenced teachers and family members to become a teacher.

Table 2.c: Practice amongst B.Ed course trainees

Practice-based aspect (n=100)	Present (%)	Not present (%)
Response to finding illness in students	95	5
Etiquette training in college	62	38
Interest to take private tuition	88	12
Advantages of this course over others	92	8

Around 95% had a good response about identifying illness in students as early as possible. Only 62% of study subjects said there was etiquette training in this college. 88% trainees had an idea about taking tuitions. 92% of them said that there was a distinct advantage of this course over others.

Discussion

As there are no studies taking this quest (trainee evaluation) into account, the discussion is based on a comparison between the B Ed and D Ed trainees.

Table 3: Comparison between B Ed and D Ed trainees

Sl. No.	Parameters KAP	B Ed (n=100, %)	D Ed (n=50, %)	Z statistic	p-value
1	Knowledge of First Aid	90	60	3.974	> 0.05
2	Response to identify illness in school students	95	90	1.048	< 0.05*
3	Attitude to pay special attention to disabled students and identify mental health issues	95	92	0.680	< 0.05*
4	Attitude to handle mischievous students	66	62	0.480	< 0.05*
5	Interest in extracurricular activities	88	88	0.000	< 0.05*
6	Knowledge of Computers usage regarding the health issues	65	64	0.121	< 0.05*
7	Interest to take private tuition	88	70	2.483	> 0.05
8	Language proficiency (Kannada & English)	82	80	0.292	< 0.05*
9	Etiquette training	62	10	8.066	> 0.05

*Statistically significant at a 5% level of significance

Among our trainees, B.Ed trainees fared better than D.Ed trainees. As First aid is essential care given before referring the student to a healthcare center, our study shows that 90% of B.Ed trainees had good knowledge of the usage of First aid kits compared to 60% of D.Ed trainees. Where a study done by Sunil Kumar et al⁸ showed that among those who had heard first aid 210 (78.8%) had replied that first aid has to be given in case of wounds whereas only 77 (30.2%) were aware that even fainting needs first aid care.

Around 95% of B.Ed trainees had significant knowledge like how to identify ill students and refer them early to the healthcare center compared to D.Ed trainees (90%) and it was statistically significant with $p < 0.05$ (Table 3). Here knowledge is essential as they act as the bridge in referring the ill student as early as possible. A study conducted by Arnold M⁹ et al showed Dental caries was the main health defect identified (22.9%, N=2247). Other leading conditions included: skin diseases (2.9%, N=202); anaemia (2.9%, N=202); visual defects (1.8%, N=182); and suspected heart disease (1.2%, N=120).

Both trainees had good knowledge in identifying disabled students earlier and helping them to get adjusted to the school atmosphere and refer them earlier, it was statistically significant with $p < 0.05$ (Table 3). A study by Adhya Soni¹⁰ showed that People with learning disabilities may feel they are different from others, some have physical disabilities that set them apart from others, or may feel they are inferior because they are more reliant on the support of others. A poor self-image can be a catalyst for mental health.

Around 66% of B.Ed and 62% D.Ed trainees had knowledge on how to handle mischievous students

so that their behaviour should not affect their learning ability and affect other students in the class. And it was statistically significant with $p < 0.05$ (Table 3). A study by Walker et. Al¹¹, showed that although there may be clean proof assisting the significance of early prevention efforts for disruptive conduct problems, faculties regularly fail to pick out college students in want of offerings early enough.

Around 88% of both B.Ed and D.Ed trainees had an Interest in extracurricular activities. And it was statistically significant with $p < 0.05$ (Table 3).

Knowledge of Computer usage was fair better in B.Ed trainees (65%) as compared to D.Ed trainees (64%), it was statistically significant with $p < 0.05$ (Table 3). In today's era computer usage helps an important role in teaching methods, a study by Jyothi Bhalla¹² says that the identification of comprehensive ways of computer use empowers the stakeholders with vital information and may assist the implementation of appropriate measures to fully use computers in the teaching-learning process.

In 88% of B.Ed trainees are interested to take private tuition compared to D.Ed trainees (70%).

In 82% of B.Ed trainees had language proficiency compared to D.Ed trainees (80%), it was statistically significant with $p < 0.05$ (Table 3) whereas a study done by Farrell and Richards¹³ showed that teachers who are less proficient could encounter difficulties in correcting the errors of language learners.

In 62% of B.Ed trainees had adequate knowledge of Etiquette compared to D.Ed trainees (10%).

Conclusion: The disparity between the trainees of training of both the courses is majorly based on their educational status. Those who have opted for B Ed have passed degrees like B.SC or B.A helps

them to understand better and work more efficiently. Meanwhile, the trainees doing D Ed have joined immediately after the completion of their 12th standard which makes them strive more and work even harder towards the course compared to the former.

Another important aspect noted is the limited knowledge about health-related topics. This has to be addressed during teacher training by including contact sessions with PHC's, the application of the same need to be assessed during their practical sessions.

Most of the trainees have limited knowledge of the usage of computers, which can be addressed by incorporating computer usage sessions.

Limitations:

- a. The study was conducted in a small population.

Recommendations:

- a. Skill-based assessments like first aid management and taking care of injured students for trainees both in practical and theory should be made compulsory.
- b. Assessment of the trainees more frequently in terms of internals and preparatory exams regarding the health-related topics
- c. Changing the curriculum of the teacher's training program and incorporating more health-related topics.
- d. Government and Policymakers should bring the changes in the teachers' training program and revise it on a regular basis.
- e. Inclusion of training of primordial prevention on health-related issues through local PHCs for trainees.

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