KNOWLEDGE, BELIEFS ON EPILEPSY AND PRACTICE ON EPILEPSY FIRST AID MANAGEMENT AMONG STUDENTS OF BANGLADESH HEALTH PROFESSIONAL INSTITUTE, CRP, SAVAR DHAKA

By

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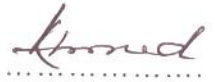Professor Department of Statistics   15-03-2021

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As supervisors of Ms. Sonika Regmi's MSc Thesis work, we certify that we consider his thesis **"Knowledge, Beliefs on epilepsy and practice on epilepsy first aid management among students of Bangladesh Health Professional Institute, CRP, Savar Dhaka"** to be suitable for examination.

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DECLARATION

- This work has not been previously accepted in substance for any degree and is not
  concurrently submitted in candidature for any degree.

- This dissertation in being submitted in partial fulfilment of the requirement for the degree of MSc in Rehabilitation Science.

- This dissertation is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

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LIST OF ABBREVIATION AND ACRONYMS

$\chi 2$=chi-square

KBP= Knowledge Belief and Practice

K-score= Knowledge score

P-score= Practice score

B-score= Belief score

WHO= World Health Organization

MET =Metabolic Equivalent Tasks

SD= Standard Deviation

CI= Confidence interval

ABSTRACT

Introduction and background: A chronic non-communicable disease of brain characterized by recurrent seizure. More than fifty million people in the worldwide are suffering from epilepsy, it is one of the most common neurological diseases globally. In Bangladesh itself nearly 1.5 to 2 million people are suffering from. Sometime epilepsy may result in significant disability, hence high knowledge, practice and positive attitude are mostly needed by rehabilitation professional. **Objectives**: The main objective of the study was to assess knowledge, belief and practice on epilepsy and to assess the influence of sociodemographic variables on knowledge, beliefs and practice score. **Methodology:** A quantitative cross-sectional study was performed involving 236 participants from Bangladesh Health Profession Institute. Knowledge, belief and practice (KBP) binary questionnaire including 8 question on knowledge, 12 question on belief and 3 question on practice was used to collect data from participants. The influence of age, gender, religion, faculty, person knowing someone with epilepsy versus not knowing etc. were assessed using t-test, Pearson's correlation, ANOVA appropriately when needed. **Result:** 84% participants have heard/read about epilepsy and 38% participants personally knew someone with epilepsy. 81% participant had positive belief that people with epilepsy can be employed.93% participant thought epilepsy need long term treatment. 87% participant said they will take people getting epileptic seizure directly to hospital. The knowledge level of participants regarding epilepsy was not satisfactory. And first aid practice for epileptic seizure was not appropriate. The socio-demographic variables such as age of students, family with history of epilepsy, neighbor's history of epilepsy and academic year of students had influence on knowledge score about epilepsy. The socio-demographic variables such as gender of students and family with history of epilepsy had influence on belief score about epilepsy. The socio-demographic variable: family with history of epilepsy, area of residence had influence on practice of epilepsy first aid. **Conclusion**: 0verall knowledge, beliefs and practice of rehabilitation profession students to be non-satisfactory suggesting the need of further awareness program and changes in educational intervention and first aid training regarding epilepsy among students.

Key words: Knowledge, Belief, practice, First Aid, Epilepsy, Seizure

CHAPTER I

INTRODUCTION

1.1 Background

According to World Health Organization, a chronic non-communicable disease of the brain is called epilepsy. It had affects more than 50 million people worldwide. The main characteristics of epilepsy are recurrent seizures. Seizures are brief episodes of involuntary movement that may involve a part of the body or the entire body and are sometimes accompanied by loss of consciousness and control of bowel or bladder function. Seizure attack are a result of excessive electrical discharges in a group of brain cells ("Epilepsy," 2019). It is also defined as the condition were continuous seizures occurs with brief episodes and spread entire body, causes loss of vital organ functions and alters the brain functions and causes repeated seizures (Umashankar, 2017, p. 528-547).

Epilepsy is broadly classified into two main categories based on the seizure type. Partial or focal seizure which is sub categorized as Simple partial seizures and Complex partial seizures. And Generalized seizure which is further classified as Tonic-Clonic seizures, Absence seizures, Myoclonic seizures, Atonic seizures and Tonic or Clonic seizure (Umashankar, 2017, p. 528-547). The epileptic patients may develop behavioral and cognitive problems. They might have complications like interictal personality where patient develops humorlessness, dependence obsessions, anger, hypo or hyper sexuality, emotionality and so on. Similarly, patient develops memory loss, violent behavior, aspiration of secretions, fractures, shoulder dislocation, tongue, lip or cheek injuries caused by biting, cardiac arrhythmias, myocardial-infraction, head trauma, pulmonary edema. Whereas, in complex partial seizures emotional stress are easily triggered (Umashankar, 2017, p.528-547). A study has also found that the individual with epilepsy had poorest communication, self-image and future expectations, whereas in later life handicapped adolescents communicated openly about their illness with family and friends and were most positive about their social adjustments and futures (Hodgman et al., 1979, p.298-304). It has also been successfully found, women with epilepsy and uses of anti-epileptic drugs has high risk of preeclampsia, bleeding in pregnancy and preterm birth (Borthen, 2015, p. 32-34).

The study has also explored preventive measures of epilepsy by life style changes along with exercise behavioral approach as well as epileptic triggers can be avoided by using sleep hygiene, avoiding alcohol and smoking, relaxations methods which include deep breathing, biofeedback and medication techniques. Similarly, exercise which keeps physically and mentally healthy, dietary measures which includes fresh vegetables, fruits and also dietary products to maintain calcium levels (Umashankar, 2017, p.528-547).

The immediate guidelines in management of epileptic patients proposed by Epilepsy Society. One should be clam and look for the comfort of seizure patient. You should note the time of onset of seizure as well as the time duration of seizure. Put cushion or pillow to support their head but don't try to hold or stop the movement. Do not give anything per mouth during the attack. If the seizure duration extent beyond 5 minutes take patient immediately to hospital. Be with patient during and after seizure attack. After the seizure has stopped the individual might be still confused so the necessary precaution should be taken. Gently put them in recovery position, check that breathing is returning to normal or not and check their mouth to see nothing is blocking their airway such as food or false teeth. If breathing is difficult after seizure has stopped, individual should be taken to hospital. Stay with them until they are fully recovered ("NICE guidelines on anti-epileptic drugs," 2019).

The studies have found that non-operative management like clonazepam, clobazam, sodium valporate, Phenobarbital, levetiracetam, ethosodium, phenytoin, tiripentol, gabapentin, lacosamide, carbamazepine and so on8. To decrease the risk of neural tube defects women are given folic acid supplementation (1-4 mg per day) (Ramaratnam, Marson, & Singh, 2017, p. 153-172). On the other hand, surgical management like antero medial temporal resection, corpus callosotomy, hemispherectomy, vagal nerve stimulation, deep brain stimulation and so on has been reported (Ramaratnam, Marson, & Singh, 2017, p.153-172). However, the study has also explored the self-management support can be initiated by behavioral changes strategies, skill building and problem solving, developing action plans and setting goals (Helmers et al., 2017, p. 220-224).

According to the first national epilepsy survey conducted in Bangladesh said that 9 in 1000 population in country were suffering from epilepsy. it also revealed that 9 in 10 active cases of epilepsy does not receive appropriate treatment. The most common type of epilepsy in Bangladesh was generalized tonic clonic seizure, partial epilepsy ("First national epilepsy survey in Bangladesh," 2018). A study among adolescent assert that familiarity with epilepsy was very less and respondents generally lacked knowledge about seizure and epilepsy and also findings suggest that epilepsy is associated to stigma (Austin, Shafer, & Deering, 2002, p. 368-375). In Bangladesh, majority of people has superstitious belief about epilepsy. This believes and negative attitude of society and family create negligence in diagnosis, medical, rehabilitation management, and other needs of patient. In addition, in most cases they seek advice of Ojha, spiritual healer and indigenous practitioner rather than physician (MA Mannan, 2004).

A study shows that people with intellectual disability has higher frequency of epilepsy occurrence than the general population and also seems to increase with the severity of disability. In other hand in few cases, the development of epilepsy has caused cognitive decline or physical disability, usually associated with repeated head injury or through anoxic episodes (Kerr & Joshi, 2001). The rehabilitation is very useful for the person with epilepsy.

Bangladesh Health Professional institute (BHPI), an academic body of Centre for the Rehabilitation of the Paralyzed (CRP) provide education for rehabilitation profession (physiotherapist, occupational therapist and speech and language therapist). Since this study focus on knowledge, their belief among rehabilitation professional's student about epilepsy and their immediate measures following seizures, BHPI was chosen as main area of study.

1.2 Justification

Epilepsy is a disease of brain characterized by recurrent seizures attacks. Seizures are results of wrong signals send by groups of neurons and nerve cells in the brain. People with epilepsy may have strange sensation and may behave strangely. During seizure attack, they have violent muscle spasm and or loss of consciousness. There are many cause of epilepsy, it can be caused due to brain infection, injury in brain and abnormal brain development. However, in most of the cases, the cause is idiopathic. EEG, brain scan is used to diagnosed the disease and treatment are started right way. Since there is no cure of epilepsy, the medical treatment focused mainly on symptomatic management, especially to control seizure attacks. If the medicine does not show positive outcome, the surgery or device implantation may be helpful. Even diet has shown positive outcome in controlling seizure attacks in children ("Epilepsy," 2019).

More than fifty million people in the world have epilepsy and almost 5 million people are newly diagnosed with epilepsy each year. It is one of the most common neurological diseases globally. 49 per 100000 people are diagnosed with epilepsy in high-income countries, this figure rise to 139 for low-income countries. About 80% of epilepsy patient lives among low income and among countries with middle income ("Epilepsy," 2019). In Southeast Asia nearly 15 million (1%) of population are suffering from epilepsy ("Epilepsy in the WHO South East Asian Region | Bridging the gap," 2017). Similarly, in Bangladesh nearly 1.5 to 2 million people had epilepsy. 30-40% of them does not receive proper medical treatment and believes in treatment by traditional healer. The false beliefs, superstition make the condition worse. The cost of drug for epilepsy is other major problem in Bangladesh ("Epilepsy in Bangladesh," 2016).

There was no known study conduct to assess the knowledge and attitude among general population or health care professional in Bangladesh. The study, conducted in various countries including nearby countries like India and Pakistan shows the need of such study in Bangladesh. A study among medical students had reported that there are major gaps in knowledge about epilepsy disease and they have also suggested for upcoming physicians must undergo courses of epilepsy to increase the level of their education of the disease, and attain the relevant treatment of epileptics in their professional careers (Ahmed et al., 2015). Similarly, a multicenter study in five different countries among university health student had low level of that knowledge

about epilepsy in health students, nevertheless in two countries, it was slightly higher, especially regarding the medical aspects of the disease. And also they had reported that a change in the way of treating people with epileptic condition may increase their opportunities of social and professional integration (Souza et al., 2018, p. 112-116).

Similarly, in India there was lack of communication about knowledge and attitude towards epilepsy and treatment practices. About 78% of person with epilepsy were affected by treatment gap despite of availability of medicine and national epilepsy program have explored that there will be generation of awareness through multimedia, including print and electronic media (Tripathi et al., 2012, p. 89). The studies had found more over tolerant attitude towards perceptions of stigma and findings also indicated the need for improvement in certain aspects of knowledge and understanding, through formal education among students in university (Ab Rahman, 2005, p. 593-596). In Bangladesh, majority of people had superstitious belief about epilepsy. This believes and negative attitude of society and family create negligence in diagnosis, medical, rehabilitation management, and other needs of patient. In addition, in most cases they seek advice of Ojha, spiritual healer and indigenous practitioner rather than physician (MA Mannan, 2004). Thus these made it essential to conduct more research to assess the knowledge about epilepsy.

Sometime epilepsy may result in significant disability. Rehabilitation professionals (physiotherapist, occupational therapist and speech and language therapist) often have to see patients who are effected with epilepsy .which is present as a comorbidity in some of the conditions like autism, depression, anxiety, dementia, migraine, heart disease, peptic ulcer, arthritis, cerebral palsy mostly in spastic quadriplegic, dyskinetic, and ataxic hypotonic, intracranial tumors, somatic disorder and so on (Steffenburg, Steffenburg, & Gillberg, 2003) (Keezer, Sisodiya, & Sander, 2016, p. 106-115) (Shevell, Dagenais, & Hall, 2009, p. 2090-2096) , (Gaitatzis, Carroll, Majeed, & Sander, 2004, p. 1613-1622). A study conducted in Bangladesh among children showed that the convulsive disability and poor cognitive skill were seen among child with disability. In those cases, rehabilitation service is essential (Banu et al., 2003, p. 45)

Therefore, need of an hour for an Allied Health professional to know the immediate measures of seizures play crucial role. Whereas, various studies show that many students are not aware about epilepsy and its immediate measures. Hence, this study

will determine the knowledge, belief and practice on epilepsy and their immediate measures following seizures among BHPI students of Allied Health Professional

1.3 Research question

What is the extent of knowledge, belief on epilepsy and practice on its first aid management among students of Bangladesh health professional institute?

1.4 Operational definition

Knowledge: Familiarity, awareness, or understanding of someone or something.

Belief: The feeling of being certain that something exists or is true

Practice: Something that is usually or regularly done.

Epilepsy: Epilepsy is a disease of central nervous system characterized by seizures or periods of unusual behavior, unusual sensation and sometime loss of awareness as a result of abnormal electrical activity of brain.

Seizure: Seizure is a symptoms characterized by changes in behavior or feelings, involuntary muscle movements and changes in level of consciousness as a result of uncontrolled electrical disturbance in the brain.

First aid: Emergency or immediate care provided when a person is injured or ill until full medical treatment is available.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

Literature review is the summary of previous research done on the related topic. It summarized, enumerate and clarify the previous research. It acts as the base for research. It acknowledges the work of previous researcher and identifies the gap if present. It can be any new interpretation of previous work or can be combination of old and new interpretation of previous work. It provides the guideline to the researcher, act as source of information for professionals. It also acts as background for research paper evaluation ("What is a literature review? - Literature Review - LibGuides at Bloomsburg University of Pennsylvania Library," 2020). Literature review could be a problem if not conducted properly. Mainly two type of literature reviews, experimental and theoretical. Experimental literature reviews refer to analyzing all available information available on a particular topic and finding the gap that need to be addressed. Theoretical literature review refers to summering the experimental literature review and noting it in an organized manner (Sachdev, 2018., p. 13-18).

2.2 Literature review

Christopher H. Hodgman, Elizabeth R. McAnarney, Gary J. Myers, Howard Iker, with Ross McKinney, Dean Parmelee, et al. [1979] conducted experimental study where 25 adolescents with epilepsy were identified and were evaluated neurologically. The study then progressed in interview both adolescents and their parents where semi-structured interview were used following questionnaires. For the parents the authors included instruction on coping skills with family, school and social areas of their child. Similarly, every adolescent was evaluated neurologically with history, physical examination and review of past medical record. Further, authors claimed the best neurologically had the poorest communication, self-image and future expectations. Whereas, the neurologically more handicapped adolescent communicated openly about their illness to family and friends and were positive about their social adjustments and futures. Lastly, authors proved grade by valuable index like social and economic functions with

their appropriate age and was not evaluated by school succeed accuracy (Hodgman et al., 1979, p. 298-304). A study conducted on obstetrical complications in women with epilepsy had discussed various aspects of complication in fifteen years. The author asserted higher risk of preeclampsia, gestational hypertension, bleeding, preterm birth and so on as complications. Further, authors have reviewed complication of usage of antiepileptic drugs during pregnancy and its effect on labour too. Lastly, author concluded newer antiepileptic drugs for the treatment of epilepsy in pregnancy could increase risk of complications therefore closed monitoring must be done to avoid risk (Borthen, 2015, p. 32-34).

Vibhangini S. Wasade, Marinna Spanaki, Revathi Iyengar, Gregory L. Barkley, Lonni Schultz did survey of neurologist's in the USA. Authors discussed various aspects of quality measures in epilepsy and not limited to epilepsy syndrome, review of EEG, MRI findings, antiepileptic drugs, surgical treatment, safety measures and so on. The authors asserted demographics, American Academy of Neurology epilepsy quality measures and comorbidities. These include childbearing potential, documentation of seizure types and frequency, epilepsy quality measures, training in neurophysiology and epilepsy practice. Further, the survey identified gaps in practice patterns such as antiepileptic drugs effects and knowledge about referral for surgical therapy. Then, the author highlighted additional education efforts needed to increase awareness and quality of epilepsy care of various point of health care delivery among neurologists (Wasade, Spanaki, Iyengar, Barkley, & Schultz, 2012, p. 468-473)

A study had evaluated the three advantage of publicly supported National epilepsy programs where antiepileptic (first –line) drugs, 1st and 2nd line antiepileptic drugs and 1st, 2nd line antiepileptic drugs and surgery were provided. The authors found approximately six to ten million individual are live with active epilepsy in India where less than half had only received appropriate treatment. Therefore, India's Ministry of Health and Family welfare purposed the creation of national epilepsy program to overcome the gap and to improve quality of care for people with epilepsy. The problem focusses on increasing public awareness and knowledge about epilepsy to increase public awareness about epilepsy, training of health care workers for better identification and treatment of epilepsy (Megiddo et al., 2016).

The clinical commentary study titled "A review on management of epilepsy complications in health care practice" discussed various aspects of epilepsy including and not limited to types, neurophysiology, symptoms, risk factors, pathogenesis, different epilepsy syndromes and complications. The authors asserted that epilepsy could be divided into two main, partial seizures and generalized seizures. These are categorized into subtypes. The partial seizure is categorized as simple partial seizures and complex partial seizures. And generalized seizures are categorized as tonic-clonic seizures, absence seizures, myoclonic seizures, atonic seizures and tonic or clonic seizures. Further, the authors also have reviewed complications of epilepsy, most important of which are interictal personality, memory loss, violent behavior, myocardial infraction and so on. The review then progressed to discuss about prevention of epilepsy where authors have highlighted the importance of life style change, exercise, dietary measures on prevention of epilepsy. (Umashankar, 2017, p. 528-547)

Sanjay P Singh, Ram Sankaraneni, Arun R Antony [2017] in their clinical commentary, authors discussed various aspects of management including and not limited to evaluation of pediatric and adult patients. The authors asserted topics like epilepsy in women, seizure with brain tumor, HIV and antiepileptic drugs and so on. Further, authors also have reviewed both non-surgical management of epilepsy which includes folic acid supplementation to women with epilepsy, antiepileptic drugs like phenobarbitone, phenytoin, carbamazepine, clobazam and so on and surgical management where authors have highlighted on vagal nerve stimulation, corpus callosotomy and hemispherectomy (Ramaratnam, Marson, & Singh, 2017, p. 153-172). A RCT conducted in Bangladesh on side effect of phenobartital and carbemezepine in childhood epilepsy found that no excess behavioral side effect of drug in children was seen. The children were seizure free after one-year treatment with these drugs. Only few children show behavioral changes as side effect of these drugs (Banu et al., 2006).

Priscila Souza, Leslie A. Portes, Robert K. Thomas, Jorge R. Bonito, Marilia Rua, Fabio J. Pacheco et al. [2018] did the multicenter study where health profession students from Brazil, Argentina, Portugal, South Africa and the USA were surveyed regarding knowledge of epilepsy. The authors asserted 55 items of epilepsy knowledge questionnaire, out of which 34 items were to assessed knowledge about medical aspects and 21 items to assessed social aspects of epilepsy. The authors found that there was still pre-judice, stigma, lack of awareness and wrong attitudes of the population towards the disease and also progressed to discuss about awareness in influencing social interaction, study and job opportunities and emotional health of person with epilepsy. Lastly, authors appraised to enhance strategies to increase knowledge of health students for better access to basic health services by people with epilepsy nevertheless, in Brazil and Portugal it was slightly higher, but considered low in general about knowledge of epilepsy in health students (Souza et al., 2018, p. 112-116).G. Bryan Young, Paul Derry, Ingrid Hutchinson, Verity John, Suzan Matijevic, Lisa Parrent and Samuel Wiebe did survey on knowledge and attitudes in Canadian college students and discuss various aspects of epilepsy including and not limited to public attitudes towards person with epilepsy, understanding about disorder and so on. The author asserted standardized questionnaire that noted demographics, examined knowledge and attitudes regarding epilepsy and person with epilepsy. The authors found that knowledge was weakest for approximate prevalence of epilepsy, other etiologies, type of epilepsy and knowledge of antiepileptic drug induced teratogenicity. Finally, authors concluded there were better results in compare to other countries and also suggested to improve knowledge with an education brochure especially for some discrepancies of knowledge and a gender effect (Young et al., 2002, p. 652-658).

Joan K. Austin, Patricia Osborne Shafer and Jessica Beach Deering [2002] did survey study on epilepsy familiarity, knowledge and perception of stigma in adolescents' population. The authors formed thirty-seven item questionnaire and was distributed to twenty high school students. Authors founded general population adolescents indicated a general lack of familiarity and knowledge about epilepsy as well as perception that reflect stigma. Further, authors suggested to implement program for the need of public education for general population adolescents to increase knowledge and awareness to decrease the stigma associated with epilepsy (Austin, Shafer, & Deering, 2002, p. 368-

375). Another study conducted in southern Brazil among undergraduate health care students to assess their attitude and awareness. The study was conducted among medical, nursing, physiotherapy, nutrition and psychology students. Self-administer questionnaire for knowledge and attitude was used to collect data from 417 students. The study revealed the better knowledge among the higher socio-economic class students. Majority of students were familiar with epilepsy. The significant differences were found between sex, family income of students, their familiarity about disease and exposure to epileptic attacks. The study concluded that revealed that health care students were familiar with epilepsy. Although the major gap in knowledge about epilepsy was observed. It also suggested that more discussion need to done on epilepsy among undergraduate students to improve their knowledge and attitude about the disease. It will help them to provide better quality care to patients in future (Falavigna et al., 2009, p. 19-23).

A study "knowledge, attitudes and practices of health science students regarding epilepsy at the end of their curriculum in Benin "was conducted. The study included students from medical. Pharmacy, nurses, midwifery and others. Total one hundred and eighty-seven students filled the KAP questionnaire. The study revealed that 11.6% and 46.3% had good and acceptable knowledge levels (Vodougnon et al., 2019, p. 165-170). The study revealed that significant difference was found among gender, training school, familiarity and having relatives with epilepsy. A significant positive correlation was seen between knowledge levels with practice score and attitude the study concluded that the overall knowledge about epilepsy among students was low. This would create problems for health care worker in future while dealing with patients with epilepsy in future. Thus recommended to take action to improve knowledge, attitude and practice of health science students (Vodougnon et al., 2019, p. 165-170). Another study title "A questionnaire study on knowledge of and attitudes toward epilepsy in schoolchildren and university students in Rome, Italy" was conducted in 2005. The self-administered questionnaire was distributed among 344 students. The sample includes upper-middle class pupils and university undergraduate students in Rome. 91% of students were familiar with epilepsy. The unsatisfactory level of knowledge was observed for cause, diagnosis and therapy among students. The statistical significant difference on knowledge levels was seen among university and school students, familiarity of students and students who had seen epileptic seizures in real life. Most of

the variables on limitation of epilepsy had found to be significant. The study conclude that students know very few about epilepsy. The belief of epilepsy being non-curable illness had created problem of unemployment. The study suggested to designed information campaigns to create awareness among students to eliminate the belief of epilepsy as stigma in coming future (Mecarelli et al., 2007, p. 313-319).

A cross-sectional study was conducted in South East Nigeria to assess the knowledge and attitude of students to epilepsy and its treatment. A self-administered questionnaire was administered among 200 participants. The participants were from primary, junior secondary, senior secondary and university students. Most of students had heard about epilepsy and had seen the epileptic attack but majority of students shows poor knowledge, attitude and poor practice of epilepsy. However, the study did not study that the influence of various demographic variables age, education etc. on the knowledge and attitude towards epilepsy. The study suggested that the school health curriculum should include epilepsy and its related social consequences (Ezeala-Adikaibe et al., 2013, p. 299-302). A survey among secondary school students title" knowledge, attitudes and practice towards epilepsy in Batibo Health District, Cameroon" was conducted in 2009. Participant of age group 11-28 years were randomly selected and KBP questionnaire was used. Majority of students were familiar with epilepsy and witnessed a seizure attack. Study revealed that most of the participants would not marry or offer job to people with epilepsy. Majority of students had negative beliefs such as epilepsy is hereditary disease, it is contagious or its kind of insanity. The study concludes that although their higher awareness about epilepsy but high level of stigma and discrimination was seen. The negative attitude was mainly due to the traditional beliefs. The study suggested that while including the educational program the traditional beliefs local culture should be considered seriously (Njamnshi et al., 2009, p. 1262-1265).

A cross-sectional study title "knowledge of management of epilepsy in young adults in Jordan" was conducted in year 2005. The study included 16,004 participants randomly selected from all area of Jordan. The five item questionnaire was used to assessed the knowledge on management of epilepsy. The study revealed that most of the participant knew that epilepsy is best treated by neurologist, whereas some participant thought

hypnotherapy of religious heal are appropriate. Two third of believed that epilepsy is treatable. Majority of knew that protecting the head of patient is necessary during seizure attacks and less than half participant knew giving drinks post seizure was appropriate. The study also studied the influence of various socio-demographic variables on knowledge levels. The significant difference was found on age, gender, level of education and occupation of participants.   The study concludes that although the Jordan population well known about epilepsy management but still more public awareness about epilepsy is needed (Otoom et al., 2006).   Since the person with epilepsy were discriminated and marginalized in Africa, a cross-sectional study was conducted to assessed the knowledge, attitude and practice towards epilepsy in Tanzania. 426 secondary school students were included in the study and KAP questionnaire was used as a data collection tool. Forty-six percentage of participants did not know that epilepsy is not caused by heredity, brain injury, brain infection or witchcraft. In contract sixty percentage of population had wrong beliefs that epilepsy is contagious disease. The study showed 80% of students knew epilepsy is controllable. 90 percentage of students had wrong believed that person with epilepsy are mentally not fit and should not be send to school nor be allowed to play with other child. The significant difference on KAP was seen between upper and lower class (William, 1994, p. 13-18).

A cross- sectional study was conducted in Assiut city, Egypt among secondary school's students in year 2011. The main aim of study was to assessed knowledge and attitude of students towards epilepsy. A 13-item questionnaire covering different accept of knowledge and attitude of epilepsy was administered to 2226 students. All participants had heard about epilepsy. Only few students did not know that epilepsy is not a brain disease. Almost all non-epileptic said they will not marry someone with epilepsy. The study revealed that students still felt that persons with epilepsy were stigma in society and felt them different from others. The knowledge level of students was not satisfactory. Most of the students had misconception and negative attitude about epilepsy. The study revealed that higher level of knowledge is correlated with positive attitude towards people with epilepsy (Shehata & Mahran, 2011, p. 130-135).   A community based cross-sectional study was conducted to assess the knowledge, attitude and practice related to epilepsy in Ethiopia in 2015. People from Sululta community over 18 years of age with good mental health were included in the study. Half of the

participants had good knowledge about epilepsy but very few percentage of participants had positive attitude and good practice about epilepsy. The socio-economic variables such as age, area of residence, educational level, employment, familiarity about epilepsy, availability and reach of health care facility and prior knowledge about epilepsy, and students with family history of epilepsy had significant difference on KAP score. The study concluded that Sululta community were familiar with epilepsy but the attitude towards epilepsy and practice about epilepsy management was not satisfactory. Thus the community based program should be introduced to improve attitude and practice about epilepsy (Shewangizaw & Teferi, 2015, p. 1239). A cross-sectional study title "knowledge of attitudes towards and perception of epilepsy among university students in Yemen" was conducted in a year 2015. 1155 students from 10 different faculties of Sana'a university of Yemen were included in the study. One in every 5 students saw epilepsy as an insanity or mental disease. Small number of students thought the evil eye or evil spirits or as a punishment of sins done by individual. Larger percentage of population believed the children with epilepsy should not be isolated, neither they object marriage of individual with epilepsy. They believed there is no harm if people with epilepsy give birth to child. But 1in 5 students will not allow their child play with child with epilepsy and will not employ individual with epilepsy. The students of Yemen had low level of knowledge. The strong link between misconception and attitude towards epilepsy. The significant difference on KAP was seen between male and female. Thus study suggested to considered it while planning education campaign for students (Al-Eryani et al., 2015, p. 102-107).

Coming towards study Asian countries, most of the studies revealed low level of knowledge about epilepsy, negative attitude towards epilepsy and poor practice of seizure management among the participants. One such study was conducted in Turkey, title of study was" knowledge of, perception of, attitudes and practices regarding epilepsy among medical students". The main objective of study was to assess the knowledge, attitude and perception of medical students since they have significant impact on the quality of treatment of people with epilepsy. The structure KAP questionnaire was distributed among eight hundred and ninety students from Selcuk university of Konya, Turkey. Most of the students had heard about epilepsy, few of them personally know someone with epilepsy and had witness seizure. One in five student thought vitamin deficiency, psychiatric, infection, mental and homological disease as a cause of epilepsy. very few participants thought it was caused by evil spirit.

Most of the student thought that it has serious disease and thought they needed lifelong treatment. Most of the student knew putting an object in mouth as a bad first aids practice. Most of the students showed negative attitude by objecting to marry people with epilepsy and advising them not to have children. The medical students showed low level of knowledge about epilepsy and negative attitude towards epilepsy. it also showed significant difference among students of different faculties and grades. The study suggested to include training and educational program about epilepsy (Kartal, 2016, p. 115-118). Ab Fatah, Ab Rahman [2005] did survey among students in Malaysian university. The authors designed self-administered questionnaire which includes awareness, experience, knowledge and stigma towards epilepsy were appraised. The survey then progressed by completion of questionnaire by 289 university student in a week of time period. The authors observed and concluded, there is still need of improvements in certain aspects of knowledge and understanding of epilepsy. Though, authors found, findings are favorable in level of awareness. Furthermore, authors gave importance to rise on formal education regarding knowledge and understanding of epilepsy in university setting (Ab Rahman, 2005, p. 593-596).

M. Tripathi, D.C Jain, M. Gourie devi, S. Jain, V. Saxena, P.S. Chandra et al. [2012] in their clinical commentary author discussed various magnitudes for the control of epilepsy. The authors asserted mortality rate, stigma, economic burden, objectives, strategies, awareness generation and so on. Further, authors stressed more of guidelines of epilepsy management in India formulated by Indian Epilepsy Society and Epilepsy Teaching Program and also need of communication to understand gaps in knowledge and attitude toward epilepsy and treatment practice. The review then progressed to strengthening medical colleges/district hospital and also to increase the number of post graduate seats in neurology in promoting care for people with epilepsy (Tripathi et al., 2012, p. 89).

K. Radhakrishnan, J. D. Pandian, T. Santoshkumar, S. V. Thomas, T. D. Deetha, P. S. Sarma et al. [2000] in their clinical commentary authors discussed various aspects and not limited to prevalence, pattern, knowledge, attitude and practice of epilepsy. The authors conducted door to door survey covering entire semi-urban population and the questionnaire were administered for identifying persons with epilepsy in central Kerala. Further, study progressed into 3 phases screening, diagnostic and confirmation and

authors found prevalence and pattern of epilepsy is similar to that of developed countries although, attitudes were much more negative. Further, authors suggested not to over emphasize by educating people of Kerala and incorporating an adequate knowledge of epilepsy in school curriculum (Radhakrishnan et al., 2000, p. 10270-1035). Another study title "knowledge, attitude and practices of students about first aid epilepsy seizures management "was conducted among the school student in Northern Indian city. Pre-verified semi-structure questionnaire, observational checklist after role paly were used to collect the data from 117 school students from government school of Chandigarh. The participants who had read or heard about epilepsy were only included for analysis. Among all the participants 71% of them had heard or read about epilepsy. 50% of students believed that epilepsy can be hindrance to education, more than half of student believed ayurvedic treatment are more beneficial than other treatments. Many students had wrong believed that visiting religious places or exorcism could treat epilepsy. Extremely low percentage of student epilepsy was not a mental disease. And most of the student said they will call doctor as a first aid management of epilepsy The study did not found significant difference on various aspect of epilepsy among students of different residential area except in the domain of lifestyle. The students had average score in all domains of epilepsy (conceptual knowledge, management and lifestyle) (Goel et al., 2013, p. 538).

R.K Sureka, Jas Pal Dhamija, Sharad Saxena and Kuldeep Singh Yadav [2016] conducted a study and discussed various magnitudes of epilepsy knowledge, attitude and practice among undergraduate medical students in Rajasthan. The authors included 200 number of MBBS students where, 100 from first year and other from final year were taken and the study was carried out in the department of neurology in Mahatma Gandhi medical college and hospital. Further, authors designed questionnaire and were distributed among students to test knowledge, attitude and practice regarding epilepsy and found there were major gaps in first year in comparison to final year students though, they too have discrepancies in practice. Lastly, authors appraised there were still social stigma in perception of epilepsy irrespective to education and suggested for the improvement in level of education nevertheless, there were major gaps in comparison between the groups (R K, Saxena, Rijhwani, Chaturvedi, & Charan, 2016).Syed Arsalan Ahmed, Ahmed Faraz, Mohammad Adil Ramzan, Saleema

Fateema, Nabeeha Essam, Shahiraiz Shah Rizvi et al. [2015] conducted a cross sectional study in awareness and knowledge on epilepsy among undergraduate medical students. The authors discussed various aspects and not limited to frequency of knowledge and concept, types, educational tool, personal view, diagnostic, treatment and so on. Further, authors found students were much less acquainted with knowledge about treatment. Whereas, it has also been evaluated health care student of various countries in world (Brazil, Italy, Canada) have more knowledge of epilepsy. Lastly, authors concluded there are certainly major gaps in knowledge of epilepsy therefore, it is necessary to undergo courses of epilepsy with vigorous discussions to enhance level of their education of the disease and attain the relevant treatment of epileptics in their professional careers (Ahmed et al., 2015).

A study title "knowledge, belief and practice on epilepsy "was conducted among students in neighboring country Nepal. The study was conducted in central Nepal in 33 private school involving 1360 students. The study was cross –sectional and questionnaire (KBP) was used to collect the data from participants. Independent-t test and Pearson correlation were used to find the relation between various aspect and KBP scores. Few percentages of had heard or read about epilepsy and personally known someone with epilepsy. The study revealed that the knowledge levels, belief and practice about epilepsy were inadequate among students. The significant difference was found in KBP scores among male and female, female had higher scores than male participants. And the significant difference was found among students who personally know someone with epilepsy and students who did not know someone with epilepsy. Surprisely, the KBP score was found higher among the students who did not personally know someone with epilepsy. And negative correlation was found between KBP score and age, which means with increasing age the KBP score decreased (Thapa et al., 2017, p. 1-7).

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the procedure in which researcher identify, select, process and analyze information about a topic. It allows the researcher to analyze the reliability and validity of the whole study to be conducted. It mainly gives answer to question, how the data will be collected and how it will be analysed (Williams, 1980, p. 47-48). It is path through which the researchers conduct their research is research methodology. It briefly explains problem statement, research objectives and also show how, when and in which population the study will be conducted. It also gives an idea which all statistical test will be conducted and how it will be represented. It gives a clear idea of when, what and how the study will be conducted, data will be analyzed and represented (Jilcha Sileyew, 2020). Since it allowed the reader to evaluate the reliability and validity of the study, the research methodology should include some basic things. It should include what type of research was conducted, how the data was conducted, how data was analysed, which tool or method was used and why particular methods were used. The research methodology is usually written in past tense (Yelikar, 2009, p. 82).

3.2 Conceptual framework

Explain variable:

- Age
- Gender
- Religion
- Year of study
- Faculty of students
- Family history of epilepsy
- Familiarity with epilepsy

Response Variables:

- Knowledge, belief and practice.

The variables such as age, gender, religion, year of study, faculty of study, family history and familiarity with epilepsy were explain variable and variable such as knowledge, belief and practice were responded variable in this study. The influence of explain variables on response variables were study in this study.

3.3 Study objectives

3.3.1 General objective

To assess knowledge, belief and practice on epilepsy among BHPI students.

3.3.2 Specific objectives

- ➢ To determine the level of knowledge of epilepsy in students.
- ➢ To determine the belief of students towards epilepsy
- ➢ To describe the practice on epilepsy first aid management.
- ➢ To assess the influence of socio-demographic variables on knowledge, beliefs and practice scores

3.4 Study design

Knowledge, beliefs on epilepsy and practice on epilepsy first aid management was assessed through the quantitative cross-sectional study. Quantitative approach is an empirical investigation often explain my numbers. In this type of study researcher represent and manipulate certain observation that were under study. The overall aim was to convey numerically what is being seen in the research and to provide specific and observable conclusion. A cross-sectional study is a type of observational study where data will be collected from sample and will be analyzed, at a specific point in time.

3.5 Study population

The study includes 236 participants from Bangladesh Health Profession Institute (BHPI) of Savar, Dhaka, Bangladesh. The students of first year and second year of BSc in physiotherapy, BSc in occupational therapy and BSc in speech and language therapy was included in student. Sampling technique was not used since the whole population (1st year and 2nd year students) was included for study. Since the population was easy to cover and was of specific place and to control bias the whole population was used. The 3rd year and 2nd year student of BSc in occupational therapy, BSc in speech and language therapy and BSc in physiotherapy were not included in study to reduce the error and biased in study.

3.6 Study area/site

The study was conducted in Bangladesh Health Professional Institute (BHPI) in Savar, Dhaka, Bangladesh. BHPI is academic branch of Centre for Rehabilitation and Paralyzed (CRP).

3.7 Study period

The study was carried out from July 2019- July 2020, including data collection, data analysis and overall thesis writing. In particularly, data collection was conducted from December 2019-feb 2020.

3.8 Sample size

The whole population, all students of first year and second year students of BSc in Physiotherapy, BSc in Occupational therapy and BSc in Speech and Language therapy of Bangladesh Health Profession Institute (BHPI are included. The sampling of population was not done. Total 236 students were included in the study.

3.9 Inclusion and exclusion criteria

3.9.1 Inclusion criteria:
- Student of BHPI
- First year and second year students

3.9.2 Exclusion criteria:
- Not willing to participate
- Students not available at the time of data collection.

3.10 Sampling technique

No sampling technique was used since all population was included in study. Total 236 were included in the study. Each and every students qualifying in inclusion criteria were involved in study

3.11 Data collection tool/material (specific and details)

The KBP questionnaire was used to collect data. The questionnaire consists seven socio-demographic questions, 2 questions for familiarity and 25 questions to assessed knowledge, beliefs and practice (KBP). The KBP question consist of eight questions on knowledge, twelve questions on beliefs and three questions on practice. Question numbers 1 to 4 and question numbers 13 to 16 were to assessed the knowledge on epilepsy, question number 5 to 12 and question number 17 to 20 were used to assed beliefs of students regarding epilepsy and question number s21a, 21b, 21c were used to assessed practice on epilepsy first aid management. The KBP questions was binary, the response was either given in yes or no. One point was given for correct response and zero was given for incorrect response. The maximum score for knowledge was 8, for beliefs was 12 and for practice the maximum score was 3. The questionnaire was pre-vilified questionnaire from study performed in Nepal. The permission from ethical review board of CRP, principal of Bangladesh Health Profession Institute (BHPI) was sought to conduct study. The written informed consent was taken from each participants. The verbal instruction and information was given on how to fill the

questionnaire. Participants were allotted 20 minutes to fill the form. Questionnaire, pen and worksheet was needed for data collection.

3.12 Data management and analysis

Data were entered and analyzed using statistical package for social science SPSS version 25. Participants who had never heard or read about epilepsy were excluded from the statistical analysis of KBP questions. Both descriptive and comparative statistical analysis was performed for analysis data. Descriptive analysis was performed for all variables. The comparative analysis was performed to see the influence of socio-demographic variables on knowledge, belief and practice scores. Independent t-test was performed to see mean difference of K-score, B-score and P-score between two variables was significant or not. Wherever there were more than 2 variables, ANOVA was performed. The Pearson's correlation was performed to see the correlation between who variables The t-test was performed on variables such as gender, religion, year of study, family history of epilepsy and neighbor with history of epilepsy. ANOVA test was used on variables such as faculty of student and home area of participants. Pearson's correlation test was used for age. The findings were represented in tables and figures (bar chart, pie-charts, histograms). The statistical significance was taken when $p<0.05$ (95% confidence level).

3.13 Quality control and quality assurance

There was no investigation done for study, the questionnaire was used for this cross-sectional study. The pre-vilified KPB questionnaire from the study conducted in Nepal. The permission from the researcher was taken to used his questionnaire for study. For quality control and quality assurance each questions in questionnaire and participant questions were explained. Questionnaire was not translated in Bangla since the study included students. But for better clarification all questions were explained verbally by class teacher or helper. The pilot study was conducted to see if any changes is needed in the questionnaire. The participants for pilot study were chosen randomly. Total 12 participants were included in pilot study, 4 participants from each faculty. Among them 7(58.3%) were male and 5 (41.7%) were female. 11(91.7%) of them were Muslims, whereas 1 participant was non-Muslims. 6 participants were from 1st year and same

number of participants were from 2nd year. Equal number of participants were from different area of residence. Only 1(8.3%) participant had family history of epilepsy and 4(33.3%) participants had the neighbor with history of epilepsy. 10(83.3%) had read or heard about epilepsy among them only 4 (33.3%) personally knew people with epilepsy.

The respondents were asked about understanding each question and their words, clarity and completeness of the questionnaire and their suggestion for further improvement of the questions. The pilot study suggested no change.

3.14 Ethical consideration

The subjects were neither deliberately exposed nor there was any intervention involved. There were no activities that may harm or cause any problem to participants in the study. Ethical clearance was obtained from concerning authority, after getting approval from the course coordinator, supervisor and institutional review board (IRB). Since study was conducted in Bangladesh Health Professional Institute, Dhaka, Bangladesh, permission from principal sir of BHPI was taken. Then permission was taken from concern people of respective department (BSc. In physiotherapy, occupational therapy and speech and language therapy). The purpose of study, data collection method was clearly explained to concern personnel.

Individual consent was taken from every participant involved in study. The consent form was clearly explaining the purpose of study, there right during the data collection, about the confidentiality. The participant privacy and confidentiality was maintained. There was potential harm for participant in this study.

CHAPTER IV

RESULTS

4.1 Introduction

Research chapter results where you report the finding of your study. It represents the core finding of the study, after performing the analysis of gather information and interpreting it. It represents the findings in the logical sequence. The finding reported can be the information gathered as a result of methodology that was applied. This section includes the findings of the study. The finding gathered as the result are based on different statistical analysis applied. It should be always written in the past tense and different tables and charts are used to represent the findings.

This sections includes findings presented in tables, charts, graphs. the findings also include the contextual analysis of data explaining its meaning in the sentence form. it should answer the research question along with secondary finding. If the study had many variables or if the methodology used gave more results, the researcher should select only those results which are more relevant to study ("Writing the results section," 2016, p. 45-68).

4.2 Analysis of socio-demographic characteristics of students

There were total 8 socio-demographic variables. Descriptive analysis was performed for socio-demographic variables. Tables and different charts were used to represent the findings (includes frequency, percentage). In the variable gender, 3 catories were given: male, female and others since the 3rd category did not have single entry the analysis was performed only among 2 categories. Similarly, for the socio-demographic variable religion 5 catories were given but during analysis the catories was made two. The new catories were Muslim and non- muslim, since majority of participants were muslim and for other catories the number of participants were minimum. The analysis of socio-demographic characteristic of participants were shown below.

Table 4.1: Percentage distribution of respondents by socio-demographic characteristics (N=236)

Variables	respondents	Percentage
Gender		
Male	107	45.3%
Female	129	54.7%
Religion		
Muslim	218	92.4%
Non-muslim	18	7.6%
Year of study		
First year	120	50.8%
Second year	116	49.2%
Home area		
Rural	48	20.3%
Urban	137	58.1%
Semi urban	51	21.6%
Family history of epilepsy		
Yes	16	6.8%
No	220	93.2%
Neighbor with history of epilepsy		
Yes	70	29.7%
No	166	70.3%

The above table 4.1 described the socio-demographic status of our study participants. The study included 236 participants where more than half of participants were female (55%) and majority of participants practice Islam (muslim religion, 92%).Almost equal number of participants were first year students and second year students. More than half of participants were from urban area and others where from semi-urban and rural Most of student do not have family history (93%) of epilepsy nor they have epilepsy patients in neighbors (70%).

Table: 4.2 Distribution of participants according to their age (N=236)

Variables	Respondents	Percentage	Mean± SD
Age			
17-19	89	37.7%	
20-22	132	55.9%	20.13±1.53
23 and more	15	6.4%	

The above table 4.2 shows the distribution of participants according to their age. Majority of student were of age between 20-22 (56%) and least were 23 years and more (6%). The mean age of participant was 20 years with standard deviation of 1.5 years.
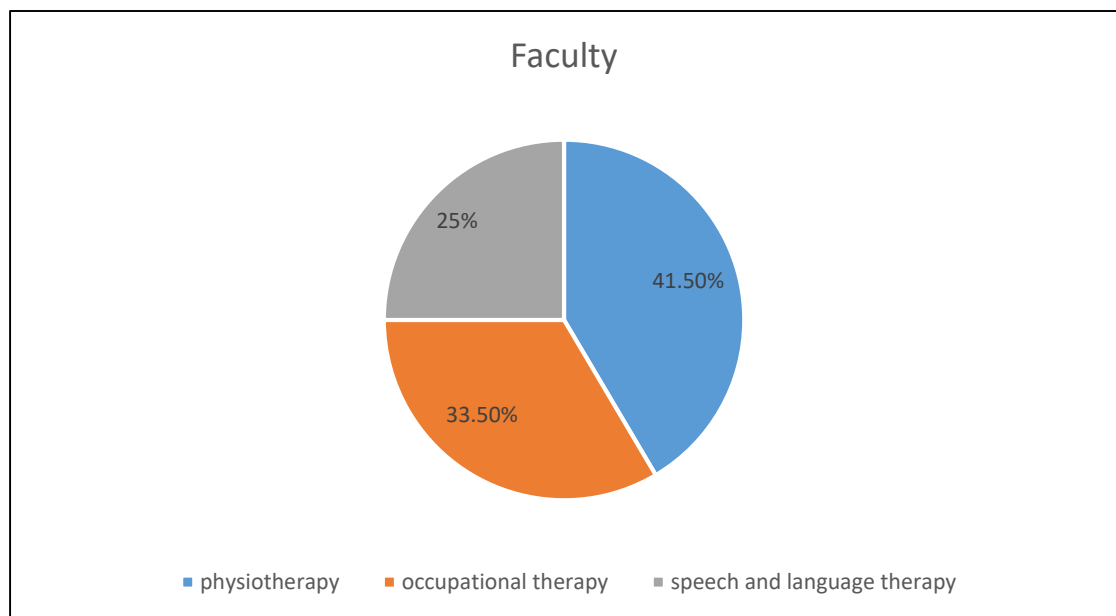
Figure 4.1: Faculty of participants (N=236)

The above figure 4.1 represent the distribution of participants according to the faculty they were studying. Around 42% of participant were studying physiotherapy, only 25% of students were studying speech and language therapy and around 34% were studying occupational therapy. Which showed that majority of participants were from physiotherapy department.

4.3 Analysis of familiarity of student with epilepsy

Two questions were used to assessed the familiarity of students about epilepsy. Descriptive analysis was performed for familiarity questions. Table was used to present the findings, table includes frequency and percentage.

Table 4.3: Familiarity of students with epilepsy (N= 236)

Questions	Yes		No	
	Respondent	percentage	Respondent	percentage
Have you ever heard/read about diseased called epilepsy?	199	84.3%	37	15.7%
Do you personally know someone with epilepsy?	89	37.7%	132	64.4%

The above table 4.3 describes the familiarity of students with epilepsy. It shows that majority of students of student had heard or read about epilepsy but majority of students personally did not know anyone with epilepsy.

4.4 Analysis of response to KBP questions

There were total 25 KBP questions (table 4.6): 8 question on knowledge, 12 questions on beliefs and 3 questions on practice. The maximum possible score for knowledge, beliefs and practice were 8, 12 and 3 respectively. The religion was categories into two categories: Muslims and non-Muslims. The religions like Christians, Buddhism, Hindu was included under category of non-Muslims. The participant who had never heard or read about an epilepsy were excluded from statistical analysis. The deferential analysis was done for all KBP questions and findings were presented in tables and charts. The different statistical tests were used to assess influence of various variables on KBP score. Independent t-test was performed to see mean difference of K-score, B-score and P-score between two variables was significant or not. Wherever there were more than 2 variables, ANOVA was performed. The t-test was performed on variables such as gender, religion, year of study, family history of epilepsy and neighbor with history of epilepsy. ANOVA test was used on variables such as faculty of student and home area of participants. Pearson's correlation test was used for age. The findings of test were represented in tables.

Table 4.4: Positive response of participants on KBP question (N=199)

SN	Question	Respondent	Percentage	Positive response
Q1.	Is epilepsy a mental disease?	150	75.4%	No
Q2.	Is epilepsy a disease of the brain?	169	84.9%	Yes
Q3.	Is epilepsy a hereditary disease?	96	48.2%	No
Q4.	Is epilepsy a contagious disease?	167	83.9%	No
Q5.	Do you think epilepsy is caused by ancestor's sin?	163	81.9%	No
Q6.	Do you think epilepsy is a hindrance to a happy life?	58	29.1%	No
Q7.	Is it possible for people with epilepsy to lead a married life?	178	89.4%	Yes
Q8.	Can people with epilepsy lead a normal sexual life?	157	78.9%	Yes
Q9.	Do you think that epilepsy affects the education of a person?	116	58.3%	No
Q10.	Do you think that epilepsy patients can be employed?	160	80.4%	Yes
Q11.	Do you think society should discriminate against person with epilepsy?	145	72.9%	No
Q12.	Would you object to sitting in the classroom adjacent to a child with epilepsy or to playing with a child with epilepsy?	128	64.3%	No
Q13.	Do you think allopathic treatment is beneficial for epilepsy?	102	51.3%	Yes
Q14.	Do you think Ayurveda treatment is beneficial for epilepsy?	143	71.9%	No
Q15.	Do you think epilepsy needs long-term treatment?	185	93%	Yes
Q16.	Do you think missing the drug once in a while is harmful?	150	75.4%	Yes
Q17.	Do you think most of the drugs used in epilepsy treatment cause side effects?	57	28.6%	No
Q18.	Do you think epilepsy can be cured?	134	67.3%	Yes
Q19.	Do you think visiting religious places helps in curing epilepsy?	113	56.8%	No
Q20.	Do you think exorcism helps to drive away epilepsy spirits from body?	173	86.9%	No
Q21	What would you do if you happen to see a person getting an epileptic attack?			
a.	Take him/her to hospital right away	25	12.6%	No
b.	Make him/her hold a bunch of keys	115	57.8%	No
c.	Sprinkle water over his/her face	111	55.8 %	No

The above table shows the number and percentage of participants who have given correct response to the KBP questions. Here eight question of knowledge about epilepsy (Q no 1 to Q no 4 and Q no 13 to Q no 16), 12 question of the beliefs about epilepsy (Q no 5 to Q no 12 and Q no 17 to Q no 20), 3 question on practice on epilepsy first aid (Q no 21a, 21b and 21c).

4.4.1 Knowledge about epilepsy

Majority of students had responded correctly to the eight questions related to epilepsy. Question number 1 to 4 and 13 to 16 are questions related to knowledge; refer to Table 4.6. three by fourth of participants knew that epilepsy is not a mental disease. Majority of participant knew that epilepsy is not a contagious disease and majority of participants knew it's a disease of brain. In contract more than half participants were unaware that epilepsy is not a hereditary disease. Majority of participant responded knew that Ayurveda treatment is not beneficial for epilepsy. Almost all participants knew epilepsy needs a long term treatment. Three by fourth of participants knew that missing drugs once in a while is harmful. In other hand only half of the participant knew that allopathic treatment is beneficial for epilepsy.
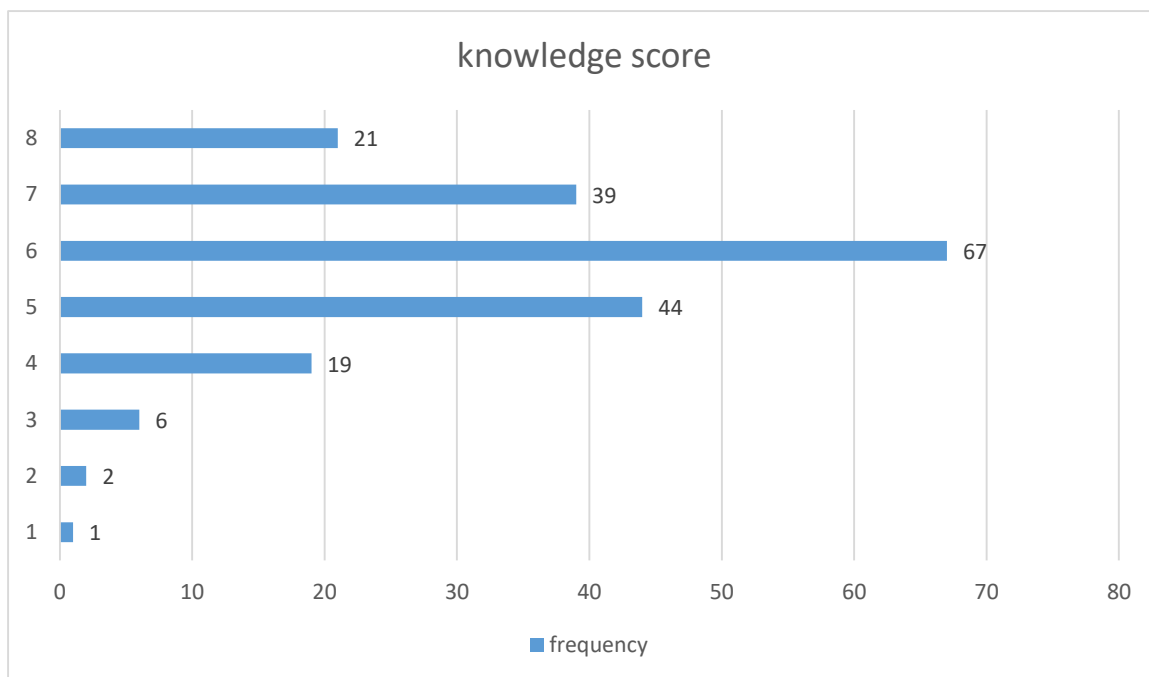
Figure 4.2 Knowledge score of participants (N=199)

The above figure 4.2 shows the knowledge score of the participants. The total knowledge score is 8. Very few participants were able to obtain total knowledge score (11%).Around 34 percentage of participants scored knowledge score 6, this was the highest frequency of participants. Only around ten percentage of participants scored knowledge score 5. Around half quarter of participants scored knowledge score 5 and 7. Negligible number of participants scored knowledge score 1, 2 and 3, percentage range from 0.5% to 3%. The mean ± SD (standard deviation) in knowledge score was 5.84 ± 1.33.

Table 4.5 Knowledge level of participants (N=199)

Knowledge level		Frequency	Percent
	Low	72	36.2
	average	67	33.7
	High	60	30.2
	Total	199	100.0

The above table 4.5 represent the knowledge level of the participants. The knowledge was categorized into low, average and high. The much difference in number of

participant was not seen in those categories. The percentage contribution in high, average and low were found to be 30 % 34% and 36 % respectively.

4.4.2 Belief about epilepsy

Most of the participants had responded positively to the 12 questions related to belief about epilepsy. Question number 5,6,7,8,9,10,11,12,13,17,18,19 and 20 are related to belief about epilepsy; refer to Table 4.6. Majority of student responds was positive, they believed epilepsy is not caused by ancestor's sin. More than half of participants believed visiting religious places does not help in curing epilepsy (57%). Most of the participants believed that exorcism does not help to drive away epilepsy spirits from body. Majority of participant also showed the positive belief that people with epilepsy with epilepsy can lead to happy married life and have normal sex life. In contract majority of participant had negative belief that epilepsy is hindrance to happy married life. Majority of participant felt that people with epilepsy can be employed and society should not discriminate against person with disability. Only half of that participant felt that epilepsy does not affect education of people with epilepsy. More than half of participant believed that epilepsy can be cured. Whereas, quarter half of participant believed that most of the drug used in epilepsy treatment cause side effects. Most of the participant said that they will not have any objection if they child will sit in classroom adjacent to child with epilepsy or play with child with epilepsy
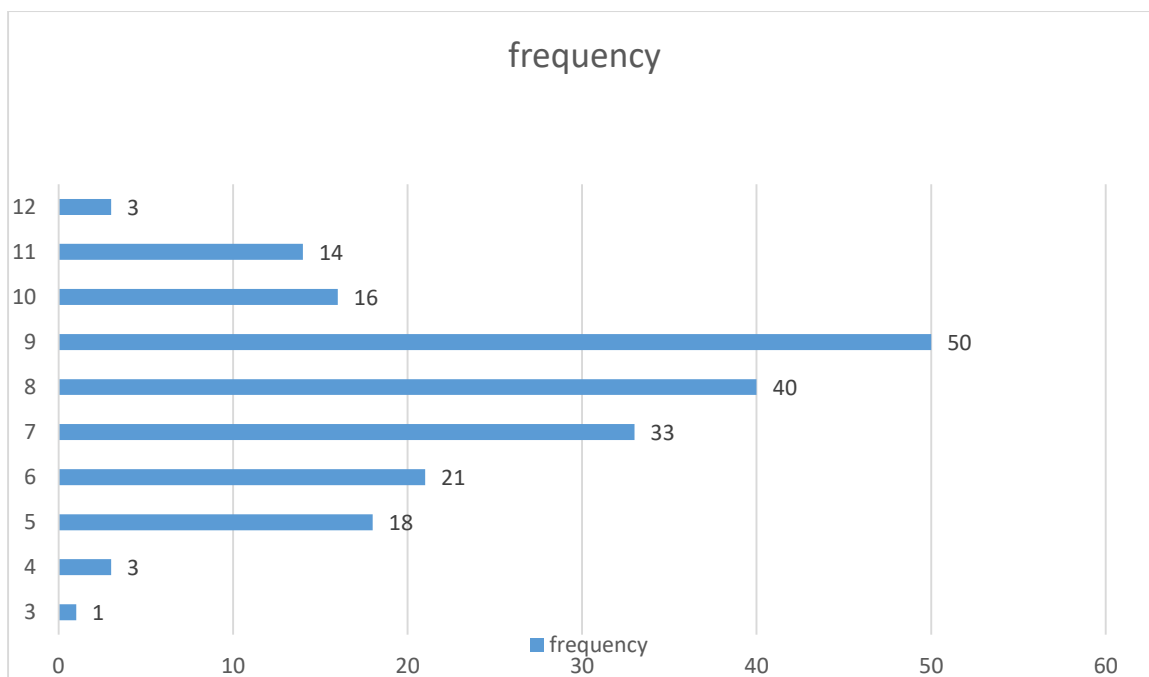
Figure 4.3 Belief score of participants (N=199)

The above figure 4.3 illustrates the belief score of participants. The maximum belief score was 12. A very least number of participants were able to score the maximum scored belief score of 12. Quarter half of participants had scored believed score 9 and it is a maximum frequency of participants. Second most achieved believed score was 8 around 21% of participant scored belief score 8. 17% and 11% participants had scored 7 and 6 respectively. Less than 10% of participant each had scored belief score 5,10 and 11 respectively. A less than two percentage of participants had scored belief score of 3 and 4. The mean$\pm$ SD (standard deviation) of belief score among the participants was 7.95 ± 1.80.

Table 4.6 Belief level of participants (N=199)

Belief level		Frequency	Percent
	Low	76	38.2
	Average	90	45.2
	High	33	16.6
	Total	199	100.0

The above table 4.6 shows the belief level of the participants. The table illustrate that less than 20% of participants had positive belief concerning epilepsy. around forty percentage participants had negative belief concerning. And around half of participant had mixed belief (some positive some negative) belief concerning epilepsy

4.4.3 Epilepsy first aid practices

Question number 21a, 21b, 21c were used to assessed the practice of epilepsy first aid among the participants. Most of the student said that they will neither make patient with epilepsy to hold a bunch of keys nor sprinkle water over his/her face during seizure attack. In other hand only quarter half 25 of participant will not take them to hospital right away; refer to Table 4.6.
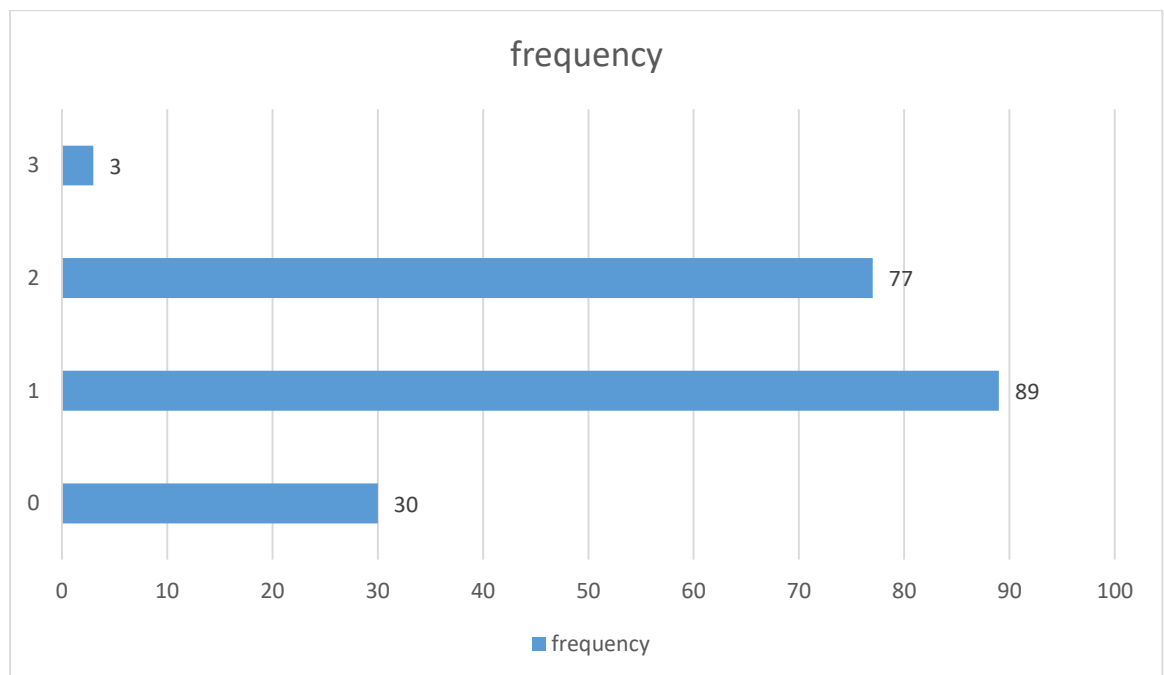
Figure 4.4 Practice score of participants (N=199)

The above figure 4.4 illustrates the practice score of participants. The maximum score for practice is 3. The mean ± SD (Standard deviation) of practice score was 1.22 ± 0.71. Most of participants scored 1(45%) followed by score 2 (39%). 30 (15.1%). And less than two percentage of the participant had scored maximum practice score 3.

4.5 Influence of academic year of participants on KBP scores of Epilepsy

Table 4.7 Mean, SD, Test values and P values of KBP scores based on academic year of students

	K-scores		B-scores		P-scores	
	First Year	Second Year	First Year	Second Year	First Year	Second Year
Mean±SD	5.55±1.35	6.12±1.25	8.02±1.98	7.88±1.61	1.31±0.79	1.21±0.66
Test value		-3.081	0.545		0.954	
P value		p=0.002*	0.59		0.34	

Independent t-test showed that the difference of K-scores between First year students (with K scores of mean and SD 5.55±1.35) and Second year students (with K scores of mean and SD 6.12±1.25) was statistically significant. (t-value=-3.081, $p<0.05$, p=0.002). Therefore, the null hypothesis was rejected and alternative hypothesis was accepted. For B-scores, the difference between First year students (with B scores of mean and SD 8.02±1.98) and Second year students (with B scores of mean and SD 7.88±1.61) was found to be statistically not significant. (t-value=0.545, $p>0.05$, p=0.59). Which means null hypothesis was accepted. Similarly, the difference of P-scores between First year students (with P scores of mean and SD 1.31±0.79) and Second year students (with P scores of mean and SD 1.21±0.66) was statistically not significant (t-value=0.954, $p>0.05$, p=0.34). Hence the null hypothesis was accepted. (referred to Table no 4.7)

Conclusion: The test results show that there was statistically significant difference on knowledge score among 1st year students and second year students. The knowledge score increases as the academic year of student upgrade. The beliefs score and practice score mean were slightly higher among second year students but there is no

statistically significant difference in beliefs score and practice score among 1st year and second year students.

4.6 Influence of family history of epilepsy of participants on KBP scores

Table 4.8 Mean, SD, test values and P values of KBP scores based on family history of epilepsy

	K-scores		B-scores		P-scores	
	Yes	No	Yes	No	Yes	No
Mean±SD	6.88±0.81	5.75±1.32	10.13±1.02	7.75±1.72	2.13±0.50	1.19±0.70
Test value	3.34		8.27		6.91	
P value	p=0.01		0.00		0.00	

Independent t-test showed that the difference of K-scores between Families with history of epilepsy (with K scores of mean and SD 6.88±0.81) and Families without history of epilepsy (with K scores of mean and SD 5.75±1.32) was statistically significant (t-value=3.34, p<0.05, p=0.01). Hence the null hypothesis was accepted and alternative hypothesis was accepted. For B-scores, the difference between Families with history of epilepsy (with B scores of mean and SD 10.13±1.02) and Families without history of epilepsy (with B scores of mean and SD 7.75±1.72) was found to be statistically significant (t-value=8.27, p<0.05, p=0.00). Therefore, null hypothesis was rejected and alternative hypothesis was accepted. Similarly, the difference of P-scores between Families with history of epilepsy (with P scores of mean and SD 2.13±0.50) and Families without history of epilepsy (with P scores of mean and SD 1.19±0.70) was statistically significant. (t-value=6.91, p<0.05, p=0.00).

Hence null hypothesis was rejected and alternative hypothesis was accepted (referred to Table no 4.8)

Conclusion: There was statistically significant difference on KBP score among the student with family history of epilepsy and student who do not have any history of epilepsy in their family. The KBP score was seen better among the students with family history of epilepsy.

4.7 Influence of neighbours' history of epilepsy of participants on KBP scores

Table 4.9 Range, mean, SD, test values and P values of KBP scores based on neighbours' history of epilepsy

	K-scores		B-scores		P-scores	
	Yes	No	Yes	No	Yes	No
Mean±SD	6.17±1.58	5.68±1.16	8.13±1.77	7.87±1.81	1.19±0.77	1.30±0.70
Test value	2.216		0.947		-1.05	
P value	p=0.029		0.35		0.30	

Independent t-test showed that the difference of K-scores between neighbours with history of epilepsy (with K scores of mean and SD 6.17±1.58) and neighbours without history of epilepsy (with K scores of mean and SD 5.68±1.16) was statistically significant. (t-value=2.216, p<0.05, p=0.029). Therefore, null hypothesis was rejected and alternative hypothesis was accepted. Similarly, For B-scores, the difference between neighbours with history of epilepsy (with B scores of mean and SD 8.13±1.77) and neighbours without history of epilepsy (with B scores of mean and SD 7.87±1.81) was found to be statistically not significant. (t-value=-0.947, p>0.05, p=0.35). Hence, null hypothesis was accepted. However, the difference of P-scores

between neighbours with history of epilepsy (with P scores of mean and 1.19±0.77) and neighbours without history of epilepsy (with P scores of mean and SD 1.30±0.70) was statistically not significant. (t-value=-1.05, p>0.05, p=0.30). Hence the null hypothesis was accepted. (referred to Table no 4.9)

Conclusion: There was statistically significant difference on knowledge score among student with neighbours history of epilepsy and students without neighbours history of epilepsy. The knowledge score is better among the students with neighbour with history of epilepsy. The slight difference on mean of beliefs score and practice score was seen but there was no statistically difference on beliefs score and practice score among students with neighbours history of epilepsy and students without neighbours history of epilepsy.

4.8 Influence of gender of participant on KBP scores

Table 4.10 Mean, SD, test values and P values of KBP scores based on gender

	K-scores		B-scores		P-scores	
	Male	Female	Male	Female	Male	Female
Mean±SD	5.89±1.31	5.80±1.35	7.61±1.76	8.22±1.79	1.28±0.69	1.25±0.76
Test value	0.445		-2.38		0.306	
P value	p=0.66		0.018		0.760	

Independent t-test showed that the difference of K-scores between males (with K scores of mean and SD 5.89±1.31) and females (with K scores of mean and SD 5.80±1.35) was statistically not significant. (t-value=0.447, p>0.05, p=0.066). Hence, null hypothesis was accepted. However, For B-scores, the difference between males (with B scores of mean and SD 7.61±1.76) and females (with B scores of mean and SD 8.22±1.79) was found to be statistically significant. (t-value=-0.2.38, p<0.05,

p=0.018). Therefore, null hypothesis was rejected and alternative hypothesis was accepted. Similarly, the difference of P-scores between males (with P scores of mean and SD 1.28±0.69) and females (with P scores of mean and SD 1.25±0.76) was statistically not significant. (t-value= 0.306, p>0.05, p=0.760). Hence, null hypothesis was accepted. (referred to Table no 4.10)

Conclusion: The slight difference on mean knowledge score among male and female was seen, however there was no statistically significant difference on knowledge score among male and female. However, there was statistically significant difference on beliefs score among male and female. The beliefs score was higher in female students than male students. Similarly, there was no statistically significant difference in practice score among male and female students.

4.9 Influence of religion of participants on KBP scores

Table 4.11 Mean, SD, test values and P values of KBP based on religion

	K-scores		B-scores		P-scores	
	Muslims	Non-Muslims	Muslims	Non-Muslims	Muslims	Non-Muslims
Mean±SD	5.83±1.32	5.93±1.21	7.92±1.83	8.21±1.25	1.28±0.72	1±0.78
Test value	-0.261		-0.570		1.42	
P value	p=0.79		0.57		0.16	

Independent t-test showed that the difference of K-scores between Muslims (with K scores of mean and SD 5.83±1.32) and non-Muslims (with K scores of mean and SD 5.93±1.21) was statistically not significant. (t-value=-0.261, p>0.05, p=0.79). Hence, the null hypothesis is accepted. Likewise, For B-scores, the difference between Muslims (with B scores of mean and SD 7.92±1.83) and non-Muslims (with B scores of mean and SD 8.21±1.25) was found to be statistically not significant. (t-value=-0.570, p>0.05, p=0.28). Therefore, the null hypothesis was accepted. Similarly, the

difference of P-scores between Muslims (with P scores of mean and SD 1.28±0.72) and non-Muslims (with P scores of mean and SD 1±0.78) was statistically not significant. (t-value= 1.42, p>0.05, p=0.16). Hence, the null hypothesis was accepted. (referred to Table no 4.11).

Conclusion: The slight difference on mean knowledge score and practice score among Muslims students and non-Muslims students was seen. However, the was no statistically significant difference on knowledge score and practice score among Muslims students and non- Muslims students.

4.10 Influence of faculty of the participants on KBP scores

Table 4.12 Mean, SD, test values and P values of KBP scores based on field of study

	K-scores			B-scores			P-score		
	PT	OT	ST	PT	OT	ST	PT	OT	ST
Mean ±SD	5.92± 1.49	5.81± 1.15	5.72± 1.24	7.77± 1.69	8.04± 1.97	8.16± 1.72	1.36± 0.71	1.26±0.73	1.70±0 .74
Test value		0.351			0.821			2.388	
P value		p=0.70			0.44			0.09	

ANOVA analysis showed that the difference of K-scores among students studying Physiotherapy (with K scores of mean and SD 5.92±1.49), students studying Occupational Therapy (with K scores of mean and SD 5.81±1.15) and students studying Speech Therapy (with K scores of mean and SD 5.72±1.24) was statistically not significant. Hence, the null hypothesis was accepted. (F-value=-0.351, p>0.05, p=0.70). Likewise, For B-scores, the difference among students studying Physiotherapy (with B scores of mean and SD 7.77±1.69), students studying

Occupational Therapy (with B scores of mean and SD 8.04±1.97) and students studying Speech Therapy (with B scores of mean and SD 8.16±1.72) was statistically not significant. (F-value= 0.821, p>0.05, p=0.44). Therefore, null hypothesis was accepted. Similarly, the difference of P-scores among students studying Physiotherapy (with P scores of mean and SD 1.36±0.71), students studying Occupational Therapy (with P scores of mean and SD 1.26±0.73) and students studying Speech Therapy (with P scores of mean and SD 1.70±0.74) was statistically not significant. (F-value=2.388, p>0.05, p=0.09). Hence, the null hypothesis is accepted. (referred to Table no 4.12).

Conclusion: The slight difference on mean knowledge score, beliefs score and practice score was seen among physiotherapy students, occupational therapy students and speech and language therapy students. However, there was no statistically significant difference on knowledge score, beliefs score and practice score among physiotherapy students, occupational therapy students and speech and language therapy students.

4.11 Influence of area of residence of participants on KBP score

Table 4.13 Mean, SD, test values and P values of KBP scores based on area of residence

	K-scores			B-scores			P-scores		
	Rural	Urban	Semi-urban	Rural	Urban	Semi-urban	Rural	Urban	Semi-urban
Mean± SD	5.69± 1.49	5.80± 1.31	6.07± 1.25	7.86± 1.73	7.84±1.83	8.31± 1.74	1.17± 0.79	1.18±0.70	1.55± 0.69
Test value		0.951			1.179			4.771	
P value		p=0.388			0.310			0.009	

ANOVA analysis showed that the difference of K-scores among residents of rural area (with K scores of mean and SD 5.69±1.49), residents of urban area (with K scores of mean and SD 5.80±1.31) and residents of semi -urban area (with K scores of mean and SD 6.07±1.25) was statistically not significant. (F-value=0.951, p>0.05, p=0.388). Hence, the null hypothesis was accepted. Likewise, For B-scores, the difference among residents of rural area (with B scores of mean and SD 7.86±1.73), residents of urban area (with B scores of mean and SD 7.84±1.83) and residents of semi-urban area (with B scores of mean and SD 8.31±1.74) was statistically not significant. (F-value= 1.179, p>0.05, p=0.310). Hence, the null hypothesis was accepted. Similarly, the difference of P-scores among residents of rural area (with P scores of mean and SD 1.17±0.79), residents of urban area (with P scores of mean and SD 1.18±0.70) and residents of semi-urban area (with P scores of mean and SD 1.55±0.69) was statistically significant. (F-value=4.771, p>0.05, p=0.009). Hence null hypothesis was rejected and alternative hypothesis was accepted. To conform among which home area had the significant difference the multiple comparison test was performed and the following table represents it. (referred to Table no 4.13)

Table 4.14 Multiple comparison table for P score (Post Hoc Test)

Home area	Significant value		
	Rural	Urban	Semi urban
Rural	-	0.10	0.05
Urban	0.10	-	0.009
Semi urban	0.05	0.009	-

The above table 4.14 represents the multiple comparisons between different home area. The post hoc test was performed to see the difference. The rural area showed the significant value 0.10 (P=0.10, P> 0.05) and 0.05 (P=0.05) when compared to urban and semi urban area respectively. Which suggested that there was significant difference in practice score among students from rural area and semi-urban area. Similarly, urban area when compared with rural and semi urban showed the significant value 0.10 (P=0.10, P> 0.05) and 0.009 (P= 0.009, P< 0.05) respectively.

Which suggest that there was significant difference in practice score among student of urban and semi-urban area.

Conclusion: There was slight difference on mean knowledge score, beliefs score and practice score among students from rural area, urban area and semi-urban area. However, there was no statistically significant difference on knowledge score and beliefs score among students from rural area, urban area and semi-urban area. But the statistical significant difference was seen on practice score. Moreover, the statically significant difference in practice score was seen among student from rural and semi urban and urban and semi urban area. The statically significant difference in practice score was not observed between student from urban and rural area.

4.12 Influence of age of participants on KBP score

Table 4.15 Mean, SD, test value, P value of KBP score based on age

	K score			B score			P score		
Age	Test value	p-value	mean±SD	Test value	p-value	mean±SD	Test value	p-value	mean±SD
	0.265	0.00	5.84±1.33	0.66	0.35	7.95±1.80	0.043	0.55	1.27±0.73

Correlation analysis showed that the correlation between knowledge score (mean ±SD = 5.84±1.33) with age (F-value= 0.265, p<0.05, p=0.00) was statistically significant. Hence the null hypothesis was rejected and alternative hypothesis was accepted. However, the correlation between beliefs scores (mean ± SD=7.95±1.80) with age (F-value= 0.66, p>0.05, p=0.66) was not statistically significant. Therefore, the null hypothesis was rejected. Similarly, the correlation between practice scores (mean ±SD= 1.27±0.73) with age (F-value=0.043, p>0.05, p=0.55) was not significant. Hence, the null hypothesis was accepted. (referred to Table no 4.15).

Conclusion: The test showed the correlation between knowledge scores and age of student was positively significant. The knowledge scores increase with increasing age of students. The correlation between beliefs score and age of student was not significant. The age of students did affect the beliefs about epilepsy among students. The correlation between practice scores and age of students was not significant. The age of students did not affect the practice of epilepsy first aid among students.

4.13 Influence of students who personally know someone with epilepsy

Table 4.16 Mean, SD, test values and P values of KBP scores based on students who personally know someone with epilepsy

	K-scores		B-scores		P-scores	
	Yes	No	Yes	No	Yes	No
Mean±SD	6.22±1.46	5.60±1.17	8.38±1.77	7.68±1.76	1.29±0.81	1.25±0.67
Test value	3.301		2.704		0.298	
P value	p=0.001		0.007		0.77	

Independent t-test showed that the difference of K-scores between students who personally know someone with epilepsy (with K scores of mean and SD 6.22±1.46) and students who personally don't know someone with epilepsy (with K scores of mean and SD 5.60±1.17) was statistically significant. (t-value=3.301, p>0.05, p=0.001). Hence, the null hypothesis was rejected and alternative hypothesis was accepted. Likewise, For B-scores, the difference between students who personally know someone with epilepsy (with B scores of mean and SD 8.38±1.77) and students who do not know (with B scores of mean and 7.68±1.76) was found to be statistically significant. (t-value=2.704, p>0.05, p=0.007). Therefore, the null hypothesis was

reject and alternative hypothesis was accepted. In contrast, the difference of P-scores between students who personally know someone with epilepsy (with P scores of mean and SD 1.29±0.81) and student personally know (with P scores of mean and SD 1.25±0.67) was statistically not significant. (t-value= 0.298, p>0.05, p=0.77). Hence, the null hypothesis was accepted. (referred to Table no 4.16).

Conclusion: A slight difference on mean knowledge score and practice score among students who personally know someone with epilepsy and who do not personally know was seen. However, the statistically significant difference was only seen on knowledge score and beliefs score. There was no influence of it on the practice score.

4.14 Influence of knowledge level on beliefs score and practice score

Table 4.17 Mean, SD, test value, P value of beliefs score and practice score based on knowledge level.

	B score			P score		
Knowledge Level	Test value	p-value	mean±SD	Test value	p-value	mean±SD
	-.002	0.98	7.95±1.80	0.138	0.052	1.27±0.73

Correlation showed that knowledge level is not statistically significant with beliefs score (mean±SD: 7.95±1.80, p= 0.98) and practice score (mean±SD: 1.27±0.73, p= 0.052). Hence the null hypothesis is accepted. Which means having a higher knowledge level does not mean students will have positive beliefs or have good first aid practice of epilepsy. (referred to Table no 4.17)

The socio-demographic variables such as age of students, family with history of epilepsy, neighbor's history of epilepsy and academic year of students had influence on knowledge score about epilepsy. The socio-demographic variables such as gender

of students and family with history of epilepsy had influence on belief score about epilepsy. The socio-demographic variable: family with history of epilepsy had influence on practice of epilepsy first aid. The influence of knowledge on belief and first aid practice was not significant.

CHAPTER V

DISCUSSION

5.1 Introduction

In this chapter we will interoperate and describe the significant of finding and compare it what is already known about the particular research problem being investigated. Here new understanding or insight that emerged in this session. Here the researcher explain how your study gave advance information to the reader which might not have been given by previous research. It highlights the importance of the study and how it can contribute to the understanding the research problem. it should state how the findings from your study and helped fill gaps in the literature that had not been previously exposed or adequately described (Baldwin, 2018, p. 39-56).

This study "knowledge, beliefs about epilepsy and practice on first aid management" is the first ever research in Bangladesh. This study is one of the unique inquires done among the rehabilitation profession students. In spite of 84.32% of student been familiar with epilepsy, their knowledge about epilepsy was not satisfactory, negative beliefs were more prevalence and show poor practice of seizure (epilepsy attack) first aid management. few variables had shown influence on knowledge, beliefs and practice of epilepsy for participants.

5.2 Familiarity with epilepsy

In our study most of the students (84%) were familiar with epilepsy which is quite similar to that study done in Malaysia (87%) (Ab Rahman, 2005, p.593-596). In comparison, a higher percentage of students were familiar in south India (98%), Nepal (94%), Cameroon, Africa (95%), Brazil (94%) and Canada (100%) (Pandian et al., 2006, p.492-497) (Thapa et al., 2017, p. 1-7) (Njamnshi et al., 2009, p. 1262-1265) (Falavigna et al., 2009, p. 19-23) (Young et al., 2002, p. 1528-1157). In contrast to 98% familiarity seen in study in south India, the north India study showed only 71% of familiarity among students (Goel et al., 2013, p. 538). The study in USA reveled the least familiarity (52%) of students about epilepsy (Austin et al., 2002, p. 368-375) and 74% of medical students were familiar about it in Turkey (Kartal, 2016, p. 115-118). Therefore, our participants were less familiar to epilepsy comparing to nearby

countries like Nepal, India (south). The familiarity about epilepsy could be increase in community level by organizing awareness program. More than 55% of nursing student were familiar with epilepsy in Rajasthan, India (R K et al., 2015, p. 7673-7679). 38% of our participants personally know someone with epilepsy which was quite similar to finding in study in Turkey (Kartal, 2016, p. 115-118). Another study conducted in Benin revealed that statically significant difference was found on knowledge and practice score among students who have heard or read about epilepsy (Vodougnon et al., 2019, p. 165-170). Although the prevalence rate of epilepsy was higher in Bangladesh our study showed that prevalence was less among family member of our study population.

5.3 Knowledge about epilepsy

In our study three by fourth quarter of students knew that epilepsy was not a mental disease. Almost similar results were seen in study conducted in USA (81%), Brazil (74%), Cameroon, Africa (72%) (Austin et al., 2002, p. 368-375) (Falavigna et al., 2009, p. 19-23) (Njamnshi et al., 2009, p. 1262-1265). Medical students of Turkey (96%) and of Pakistan (96%) answered correctly that epilepsy was not a mental disease (Kartal, 2016, p. 115-118) (Ahmed et al., 2015). In contract to our study, more number of students thought that it was not a mental disease in Malaysia (97%) (Pandian et al., 2006, p.492-497) and Canada (91%) (Young et al., 2002, p. 1528-1157). Relatively lower proportion of students had given correct response for it in south India (41%) (Pandian et al., 2006, p.492-497) and Nigeria (48%) (Ezeala-Adikaibe et al., 2013, p. 299-302). Extremely lower percentage of student had said epilepsy was not a mental disease in Tanzania (10%) (William, 1994, p. 13-18) and north India (24.5%) (Goel et al., 2013, p. 538). 15% of nursing student belief that epilepsy was a mental disease (R K et al., 2015, p. 7673-7679). Most of the student responded correctly that epilepsy was a disease of brain (84.9%). This is higher than the proportion of students who answer correctly in Tanzania (William, 1994, p. 13-18) and Nepal (45.7%) (Thapa et al., 2017, p. 1-7). The students of Egypt (8.5%) (Shehata & Mahran, 2011, p. 130-135) and Cameroon, Africa (18%) (Njamnshi et al., 2009, p. 1262-1265) had lower proportion of correct response. 84 % of participant of our study thought epilepsy was not a contagious disease: which was a correct response. It was similar to the response in Turkey (81%) (Kartal, 2016, p. 115-118)

and India (86%) (Pandian et al., 2006, p.492-497). The higher proportion of correct response was seen in medical student of Pakistan (93.35%) (Ahmed et al., 2015) and student of Malaysia (95%) (Pandian et al., 2006, p.492-497). The countries with lower proportion of student who said epilepsy was not a contagious disease are Nepal (35.3%) (Thapa et al., 2017, p. 1-7), Cameroon (59.3%) (Njamnshi et al., 2009, p. 1262-1265), Nigeria (59.4) (Ezeala-Adikaibe et al., 2013, p. 299-302), Tanzania (40%) (William, 1994, p. 13-18) and Yemen (2%) (Al-Eryani et al., 2015, p. 102-107). Only 48.2% of student were aware that epilepsy was not a hereditary disease. Which was lower than the findings in Italy (80%) (Mecarelli et al., 2007, p. 313-319), Nigeria (78%) (Ezeala-Adikaibe et al., 2013, p. 299-302) and Cameroon (75%) (Njamnshi et al., 2009, p. 1262-1265). This finding was higher than the finding of Malaysia (33%) (Pandian et al., 2006, p.492-497). Only 51.3 % of student of our study knew allopathic treatment was good for treatment of epilepsy which was almost similar to the result of neighboring country India (study in south India) where nearly half of new that (Pandian et al., 2006, p.492-497). In contract to this study in Rajasthan, India among nursing students shows that 100 of responses was correct (R K et al., 2015, p. 7673-7679). The higher proportion of response was seen in Nepal (86%) (Thapa et al., 2017, p. 1-7) Jordan (86.7%) (Otoom et al., 2006) and Brazil (94%) (Falavigna et al., 2009, p. 19-23). In other hand 71.9% students of our study new that Ayurveda is not helpful for epilepsy which was higher than of Nepal (31%) (Thapa et al., 2017, p. 1-7) and India (Pandian et al., 2006, p.492-497). In our study 93% of students and 75.4% of students knew that epilepsy needed long term treatment and missing drugs was harmful respectively. Whereas in Nepal and India, 69% and 35% knew it need lifelong treatment and 79% and 60.9% knew missing drug was harmful (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). Thus we can conclude that our students had better knowledge about the treatment than Indian and Nepal. our study showed that 36% of students had low knowledge, 33.7% had moderate knowledge and 30.2% had good knowledge about epilepsy. whereas, the knowledge level of health professional students in a study at Benin showed that 11.6% of student had good knowledge, 46% had moderate knowledge and 42% had limited knowledge about epilepsy (Vodougnon et al., 2019, p. 165-170). Similarly, in Nepal 64% of student had poor knowledge, 26% had moderate knowledge and 10% had good knowledge about epilepsy (Thapa et al., 2017, p. 1-7). The study in India, Turkey and Nigeria concluded student had poor knowledge about epilepsy (Pandian et

al., 2006, p.492-497) (Kartal, 2016, p. 115-118) (Ezeala-Adikaibe et al., 2013, p. 299-302).

Although the students answering correct answers in some question were higher but overall, study revealed that the rehabilitation health profession students still have inadequate knowledge about epilepsy. And the knowledge level of student founded to be less than the developed country whereas, it was quite similar to the developing and neighboring country. It might be due to lack of awareness program in those country. This could be improved by including training and awareness program about epilepsy and its first aid management.

5.3 Beliefs concerning epilepsy

Although majority of the students were familiar with epilepsy, their beliefs were far more pessimistic only 29 % and 89% of students believed that epilepsy was not hindrance to happy life and leads to happy married life. In Nepal 35% and 72% of students believed that epilepsy was not hindrance to happy life and they can lead normal married life (Thapa et al., 2017, p. 1-7) The finding of our study is quite similar to the study findings of Nepal. In contract to this the findings of Rajasthan India showed that 90% of health profession students believed that epilepsy was not hindrance to happy life (R K et al., 2015, p. 7673-7679). This result contrast with another finding in India, a same study conducted in Kerala showed that only 38% thought epilepsy is not hindrance to happy life (Pandian et al., 2006, p.492-497). 84% of student in Canada believed people with epilepsy could lead happy married life (Young et al., 2002, p. 1528-1157). Most of the student (82%) in our study did not believed that epilepsy was caused by ancestor sin which is similar to finding to of study in Kerala India (85.2%) (Pandian et al., 2006, p.492-497). This finding were higher in Nepal (93%) and Canada (95%) (Thapa et al., 2017, p. 1-7) (Young et al., 2002, p. 1528-1157). 79% of participants believed people with epilepsy can have normal sex life which is higher than the nearby country, Nepal (63%) and India (59%) (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). Around 58% and 80% of students showed positive believed towards education and employment of people with epilepsy. In contrast, the lower proportion of students believed epilepsy did not affect person education or employment in Nepal (41%, 69%) and India (41%, 30%) (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). Whereas, the higher

proportion of students showed positive response in both in Canada (84% for both) (Young et al., 2002, p. 1528-1157). 72.9% of BHPI student thought society should not discriminate against person with epilepsy. Conversely, the study in Nepal (57%) and India (55%) showed lower number of students thought society should not discriminate (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). 65% of student said that they will not object their child to sit with child with epilepsy in classroom which is relatively lower than that of India (87%) and Nepal (73%) (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). Conversely, higher number of student in Canada (95%) and Benin (95%) showed no discrimination against child with epilepsy (Young et al., 2002, p. 1528-1157) (Vodougnon et al., 2019, p. 165-170). Student of BHPI, Bangladesh had shown negative believed about drugs for epilepsy. Only 29% of student the thought drugs for epilepsy did not have side effect in most of the case. The finding was lower than the findings of study in Nepal (60.9%) and India (55.1%). 67% of students of our study believed that epilepsy was treatable. This percentage was much higher than in India (47%) and lower than in Nepal (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). 57% student thought visiting religious place did not help in curing epilepsy. In contrast 89.9% believed excrotism was not useful to cure epilepsy. In other hand, Nepal (86%) and Jordan (77%) study showed higher number of students believed visiting religious place did not cure epilepsy (Thapa et al., 2017, p. 1-7) (Otoom et al., 2006). Whereas, study in India shows lower percentage of students who believed visiting religious place was not helpful for curing epilepsy (Pandian et al., 2006, p.492-497). In contrast to our study findings, the higher number of students in Nepal thought excrotism was not helpful. However, the study in Pakistan (43%), Cameroon (33%) and India (78%) showed lower number of student who thought the same (Ahmed et al., 2015) (Njamnshi et al., 2009, p. 1262-1265) (Pandian et al., 2006, p.492-497). 38% of students had negative beliefs, 45% showed mix beliefs and only 17 % showed positive beliefs in our study. In contrast, Nigeria (39.15%) showed students had positive beliefs (Ezeala-Adikaibe et al., 2013, p. 299-302). However, the study in Nepalese and Indian students showed negative beliefs.

This study revealed, in Asian country and in underdeveloped or developing country had more false believe about epilepsy whereas the country where education rate was higher the false believes were much lower. The study also revealed that the

rehabilitation health professional student had negative belief about epilepsy, it mainly due to the occurrence of more negative believes in community. Therefore, the awareness program, training should be designed taking reference from those countries where negative believes were less.

5.4 Epilepsy first aid practice

The overall epilepsy (seizure attack) first aid practice was not satisfactory among students in our study. Only 56%, 58% and 13% student said that giving bunch of keys, sprinkling water in face or immediately taking person to hospital during seizure attack is not a good first aid practice. In a similar study performed in Nepal, 80 %, 75% and 18% of students said it as an inappropriate first aid practice (Thapa et al., 2017, p. 1-7). 100% students in Brazil said that sprinkling water is inappropriate first aid practice of epilepsy (Falavigna et al., 2009, p. 19-23). However, 80%, 55% and 36% of students would take immediately hospital, give bunch of key to hold and sprinkle water over face when person was having epilepsy attack (Pandian et al., 2006, p.492-497). Whereas, 74% of students in North India will take person having seizure attack immediately to hospital, taking individual to hospital immediately, sprinkling water in face or giving bunch of key to person during seizure attack was wrong first aid practice (Goel et al., 2013, p. 538). 13% of the students were not able to give the correct response ,38% scored only 1 point for practice and only 1% were able to score maximum score. Which showed that majority of students had poor first aid practice for seizure attack. Similarly, students of Cameroon showed poor practice whereas students of Jordan showed good first aid practice (Njamnshi et al., 2009, p. 1262-1265) (Otoom et al., 2006).

It showed that the first aid training program on seizure attack was highly ignored in Bangladesh. The study also revealed the urgent need of training of first aid management during seizure attack for rehabilitation professional students. Good first aid practice would be useful for their professional as well as social duties.

5.5 Influence of students who personally know someone with epilepsy and sex on KBP response

In our study, the KBP score for students who personally know person with epilepsy was higher than students who did not know. But this difference was statistically significant only for knowledge (p=0.001) and beliefs (p=0.007). The person who know someone with epilepsy would have increase in knowledge and beliefs since the will be more familiar with its cause treatment and all. But the practice on seizure would be better only if they had personally taken care of people during seizure attack or had faced such situation. In contrast, completely different result was seen in study in Nepal. The KBP score was higher among students who personally did not know person with epilepsy (Thapa et al., 2017, p. 1-7). Similarly, as in our study statistically significant difference was seen only in knowledge (p= 0.018). Similarly, the study in Ethiopia reveled personally knowing someone with epilepsy was statistically significant for knowledge level and practice about epilepsy (Shewangizaw & Teferi, 2015, p. 1239). Another study conducted in Benin also revealed that statically significant difference was found on knowledge and practice score among students who have heard or read about epilepsy and also among students who personally know someone with epilepsy (Vodougnon et al., 2019, p. 165-170). Our study also revealed that KBP scores were higher is females than in male, however the statistical significant was seen only in beliefs about epilepsy (p=0. 018). Similarly, the study in Nepal also revealed that female had higher KBP scores but statistical significant difference is seen in the knowledge score (p=0.018) only (Thapa et al., 2017, p. 1-7). But study in India and Turkey reveled female had better scores and statistical significant was seen in beliefs score (Pandian et al., 2006, p.492-497) (Kartal, 2016, p. 115-118). In contrast, study in Jordan and Benin showed better male had better KBP score in males than females (Otoom et al., 2006) (Vodougnon et al., 2019, p. 165-170). A survey in Canada showed better knowledge about epilepsy among female students (Young et al., 2002, p. 1528-1157). Our study showed KBP scores was better in students with family history or neighbors' history of epilepsy. Although, it was statistically significant difference was observed in KBP scores (p = 0.01, p =0.00, p= 0.00) for students with family history of epilepsy. But statistical significant was only observed in knowledge score for students with neighbors' history of epilepsy. Similar, in study conducted in Benin reveled statistical significant on

knowledge score among students with family history or neighbor history of epilepsy (Vodougnon et al., 2019, p. 165-170).

5.6 Influence of religion and age and area of residence on KBP scores

All most all students in our study were Muslims and minority were from other religions. The knowledge score, beliefs score was higher among Non-Muslims students and practice score was higher among Muslims student. But there is no statistically significant difference of KBP score among Muslims and Non-Muslims students. It showed that religion had negligible influence in increasing or decreasing the knowledge, belief and practice. Our finding might also be influence by the fact that most of the participant in our study were muslim. Similarly, the study in Nepal and India reveled the same results i.e. religion of student did not influence on KBP scores (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497). In both the study KBP score was seen higher in Hindu students. Similarly, to our study where higher scores are seen in majority groups. Our study showed positive correlation of age only with knowledge score (p=0.00) not with beliefs score and practice score. Similarly, the study in Nepal showed positive correlation of age with knowledge (p=0.003) (Thapa et al., 2017, p. 1-7). As the age increased, the understanding level and experience increases improving the knowledge level. In, contrast the study in India showed negative correlation of age with KBP score (Pandian et al., 2006, p.492-497). Whereas, the study in Benin and Jordan showed no correlation between age and KBP (Otoom et al., 2006) (Vodougnon et al., 2019, p. 165-170). Our study showed the difference in KBP score among students of different residential area but the significant difference is seen in practice score (t=0.009). In contrast, the study in Nepal and India did not show significant difference on KBP scores among students of different residential area (Thapa et al., 2017, p. 1-7) (Pandian et al., 2006, p.492-497).

5.7 Influence of faculty and academic year of students on KBP score

The slight difference in KBP scores were seen among students of different faculty, but there was no statistical difference among students of different faculty. Likewise, result was observed in the study conducted from India (Pandian et al., 2006, p.492-497). But study in Benin and Brazil showed statistically significant difference in knowledge score among students of different faculty (Otoom et al., 2006) (Vodougnon et al.,

2019, p. 165-170). Although the difference in KBP score was observed among students of different grades but the statically significant difference was only seen in knowledge score(p=0.002). The similar result was reveled in study in Italy, the statically significant difference was seen in the students from different grades (Mecarelli et al., 2007, p. 313-319). The other studies conducted in Turkey and Brazil reveled significant difference on beliefs of students among different faculties (Kartal, 2016, p. 115-118) (Falavigna et al., 2009, p. 19-23).

5.8 Influence of knowledge level on belief and practice score

Our study revealed that there was no correlation of knowledge level with belief score and practice score. In contrast, in a study conducted in Benin showed the positive correlation between knowledge level with belief and practice level (Vodougnon et al., 2019, p. 165-170). Similarly, study in Kerala India also showed positive correlation between knowledge level and belief (Pandian et al., 2006, p.492-497).

Our study found that the knowledge, belief and first aid practice of epilepsy among students were not satisfactory compare to that of developed country. Whereas, the results were moreover similar to the developing country, Asian and neighboring country. This difference on knowledge, belief and practice may be due to standardized education, community first aid training and awareness program and more concern of government on public health in developed countries, which are more over lacking in Asian countries. This study also gave an idea that the knowledge level and first aid practice in common individual from non-medical background may be much lower. It also showed that there are much more negative beliefs about epilepsy in the community. Thus, the educational institutes, government and non-governmental health agencies should adopt educational intervention, awareness program and training program on institutional, community and national levels to address this issue.

CHAPTER VI

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The study showed that the knowledge level of participants regarding epilepsy was not satisfactory. And first aid practice for epileptic seizure was not appropriate. Although, the belief scored showed almost mixed belief but there was the need of awareness and educational program in community levels to eliminating false belief from the community. The socio-demographic variables such as age of students, family with history of epilepsy, neighbor's history of epilepsy and academic year of students had influence on knowledge score about epilepsy. The socio-demographic variables such as gender of students and family with history of epilepsy had influence on belief score about epilepsy. The socio-demographic variable: family with history of epilepsy, area of residence had influence on practice of epilepsy first aid The study showed the knowledge level, belief level and practice level of rehabilitation health professional students and the socio-demographic characteristics influencing them. Most of the students were familiar with epilepsy but the overall knowledge, belief and practice regarding it was found unsatisfactory. The study revealed that age, neighbor's history of epilepsy, academic year have influence on knowledge, gender have influence on belief and area of residence have influence on first aid practice. Whereas, family history of epilepsy has influence on knowledge, belief and practice. The overall knowledge, beliefs and practices seems to be non-satisfactory among the rehabilitation profession students. The finding might be due to the fact that Bangladesh community lack adequate awareness program and first aid training among students as well as in community levels. Although, the study cannot be generalized to overall rehabilitation professional students but the result suggests the need of appropriate educational intervention, training on first aid training and awareness program for students as well as community.

6.2 Recommendation and policy options

The finding of the study could be utilized in all levels, individual levels, organizational level and governmental level. At individual level I would recommend it to all rehabilitation profession student, professionals as well as lectures. Rehabilitation profession student and profession could use this result to self-evaluate themselves and guide themselves to gain more knowledge awareness about first aid and participate in training as needed. The lectures could use it as a reference while planning study material for students. At organization level, the university and colleges could include first aid training and awareness program in study curriculum. At governmental level, the study finding could be utilized to plan the awareness program and training program at community level.

6.3 Limitations

Although many issues regarding KBP on epilepsy among BHPI rehabilitation health professional students was explored by the study, few limitations could be noted. Our study was only limited to one institute of particular city; it may not be considered to whole Bangladesh rehabilitation health professional students. Our study consists of binary nature, one had a fifty percentage chance of giving answer correctly, the answer may be independent of knowledge base. The basic questions related to epilepsy was included in our survey that can influence better epilepsy practices in a community. But it was well known that the concepts about epilepsy were changing, which might not had been cover by this study. The inclusion of more questions in the survey would had explored KBP on recent concepts about epilepsy and also inclusion of open ended questionnaire could explore detailed about belief about epilepsy.

6.4 Future direction

This study was limited to only one institute, so further research can be conducted with larger population from different areas of Bangladesh for validity and reliability of results. The study can also be conducted by including both students and professionals involved in rehabilitation. The study will be more useful for government if conducted in community among general population. Further study can be conducted by including open ended questions and more questions on knowledge, belief and first aid practice

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APPENDIX-I

CONSENT FORM

Bangladesh Health Professional Institute
MRS 5TH BATCH

I am Sonika Regmi, student of master in rehabilitation under Bangladesh health professional institute. As a part of my academic study, I am here to conduct a research, title "Knowledge, Beliefs on epilepsy and practice on epilepsy first aid management among students of Bangladesh Health Professional Institute, Dhaka, Bangladesh". You need to answer some question mention in this form. This will take approximately 15-20 minutes. This study is only for academic purpose. There is no potential risk for individual who participate in this studies. You can deny participating in this study or can withdraw yourself in between the study, if you wish. You also have right not to answer specific question that you don't like or do not want to answer during the study. As this study is for academic purpose, your data will be used for only this and will not be given for any other purpose. All your information will be confidential.

If you have any query or doubt about the study you are free to ask any question.

May I have your consent to proceed with the study?

Consent for study

Here I give my consent to be the part of this study. The study purpose and procedure is explaining to me. I have read and understood the above information.

Signature of participant: _____

Signature of interviewer: _____ Date: _____

APPENDIX-II

QUESTIONNAIRE

Knowledge, Beliefs, and Practices on Epilepsy among students of Bangladesh Health Professional Institute, Dhaka, Bangladesh
English language Questionnaire

A. Socio demographic characteristics of students.

1.Age:

2.Gender   1.Male ☐   2.Female ☐   3.Other ☐

3.Religion   1.Muslim ☐   2. Buddhist ☐   3.Christian ☐   4. Hindu ☐
   5. Secular ☐

4.Faculty   1.Physiotherapy ☐ 2.Occupational therapy ☐ 3.Speech and language ☐

5.Year   1.First   2.Second

6.Home area   1.Rural ☐   2.Urban ☐
   3.Semi urban ☐

7.Family history of epilepsy   1.Yes ☐   2.No ☐

8.Neighbour with history of epilepsy   1.Yes ☐   2. No ☐

B. Familiarity of students with epilepsy

1.Have you ever heard/read about a disease called epilepsy?
   1.Yes ☐   2.No ☐

2.Do you personally know someone with epilepsy?
   1.Yes ☐   2.No ☐

C.   Knowledge, Beliefs, and Practices

1. Is epilepsy a mental disease?
   1.Yes ☐   2.No ☐

2. Is epilepsy a disease of the brain?

   1.Yes ☐   2.No ☐

3. Is epilepsy a hereditary disease?

   1.Yes ☐   2.No ☐

4. Is epilepsy a contagious disease?

   1.Yes ☐   2.No ☐

5. Do you think epilepsy is caused by ancestor's sin?

   1.Yes ☐   2.No ☐

6. Do you think epilepsy is a hindrance to a happy life?

   1.Yes ☐   2.No ☐

7. Is it possible for people with epilepsy to lead a married life?

   1.Yes ☐   2.No ☐

8. Can people with epilepsy lead a normal sexual life?

   1.Yes ☐   2.No ☐

9. Do you think that epilepsy affects the education of a person?

   1.Yes ☐   2.No ☐

10. Do you think that epilepsy patients can be employed?

   1.Yes ☐   2.No ☐

11. Do you think society should discriminate against persons with epilepsy?

   1.Yes ☐   2.No ☐

12. Would you object to sitting in the classroom adjacent to a child with epilepsy or to playing with a child with epilepsy?

   1.Yes ☐   2.No ☐

13. Do you think allopathic treatment is beneficial for epilepsy?

   1.Yes ☐   2.No ☐

14. Do you think Ayurveda treatment is beneficial for epilepsy?

   1.Yes ☐ 2.No ☐

15. Do you think epilepsy needs long-term treatment?

   1.Yes ☐ 2.No ☐

16. Do you think missing the drugs once in a while is harmful?

   1.Yes ☐ 2.No ☐

17. Do you think most of the drugs used in epilepsy treatment cause side effects?

   1.Yes ☐2.No ☐

18. Do you think epilepsy can be cured?

       1.Yes ☐ 2.No ☐

19. Do you think visiting religious places helps in curing epilepsy?

    1.Yes ☐ 2.No ☐

20. Do you think exorcism helps to drive away epilepsy spirits from the body?

    1.Yes ☐ 2.No ☐

21. What would you do if you happen to see a person getting an epileptic attack?

   (a) Take him/her to hospital right away

1.Yes ☐ 2.No ☐

    (b) Make him/her hold a bunch of keys

1.Yes ☐ 2.No ☐

    (c) Sprinkle water over his/her face

1.Yes ☐ 2.No ☐

Your knowledge belief and practice of first aids

APPENDIX-III

APPROVAL OF THE THESIS PROPOSAL

বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

Ref.   Date:

CRP-BHPI/IRB/02/2020/391

                                                                    25th February 2020

To
Sonika Regmi
M.Sc. in Rehabilitation Science
Session:2018-2019, Student ID: 181180130
BHPI, CRP, Savar, Dhaka- 1343, Bangladesh

Subject: Approval of thesis proposal **"knowledge, beliefs on epilepsy and practice on epilepsy first aids management among students of Bangladesh Health Professions institute, CRP, Savar, Dhaka by ethics committee.**

Dear Sonika Regmi

Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself. as the Principal investigator. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation Proposal
2	Questionnaire (English version)
3	Information sheet & consent form.

Since the study involves use of a questionnaire that takes 25-30minutes to answer by the participants and have no likelihood of any harm to the participants, the members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 09:00 AM on 18th February, 2019 at BHPI.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

Muhammad Millat Hossain
Assistant Professor, Dept. of Rehabilitation Science
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

CRP-Chapain, Savar, Dhaka-1343, Tel : 7745464-5, 7741404
E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd, www.crp-bangladesh.org

APPENDIX-V

PERMISSION LETTER FOR DATA COLLECTION

To: The principal/vice principal

BHPI,CRP,Savar,Dhaka

Subject : application for data collection from BHPI,CRP,Savar

Dear sir,

I am sonika regmi , part-II M.SC in rehabilitation science (5th batch) student. Need to collect data for my thesis research entitiled "knowledge, beliefs on epilepsy and practice on epilepsy first aids management among students of Bangladesh Health Professions institute, CRP, Savar, Dhaka" that will be supervised by Prof. Dr. Alamgir Kabir, Professor Department of Statistics, Jahangirnagar University. Standard questionnaire will be used for collecting necessary information from student. It will take around 15-20 minutes. It is remarkable that related information which collected data will be kept confidential. Therefore, I look forward to having kindly approve for this research proposal and permission to start data collection. I also assure you and participants that will maintain all the requirements information for the study purpose , nothing else.

Sincerely yours

Sonika Regmi

Session: 2018-2019

Student id: 181180130

Student of M.SC in rehabilitation science

BHPI, CRP,Savar, Dhaka-1343, Bangladesh