

**EXPERIENCE OF THE OCCUPATIONAL THERAPIST ABOUT
THE COURSE CURRICULUM OF UNDERGRADUATE LEVEL
TO PREPARE THEM FOR PRACTICING IN BANGLADESH**

By

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This thesis is submitted in total fulfillment of the requirements for the subject
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Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis presented by me for any other degree or diploma or seminar.

No others person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any other degree or diploma in any other tertiary institution.

The ethical issues of the study has been strictly considered and protected. In case of dissemination of the findings of this project for future publication, it will be duly acknowledged as undergraduate thesis.

I am only responsible for any imprecision or mistake on my research study.

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Dedication

Dedicated to my honorable and beloved parents and elder sister

Acknowledgement

First of all I would like to pay my gratitude to the almighty Allah for giving me the passion to complete this project within time. I would like to express my deepest appreciation to my parents and my family members for their love and support to carry out this study. I would like to specially give thanks to my supervisor for his proficient guidance and help throughout the study. I am also thankful to Nazmun Nahar, Umme Aeyman and Syed Shakhawat Hossain for their precious opinions to conduct this study. My grateful thanks to Md. Yeasir Arafat Alve for his helping hands in several times during conducting this study. I want to give thanks those who help me in English translation like Umme Hamida Aktar, Mominur Rahman. My deepest thank goes to Ashley Willock for checking my English. Thanks to all of my friends for giving their direct and indirect inspiration and support me in different critical situation.

A special note of thanks those who participated in this study for having shared their experience and views. Lastly my apologies go with the persons if I miss out anyone accidentally.

List of Abbreviations

BHPI- Bangladesh Health Professions Institute

B. Sc- Bachelor of Science

BOTA- Bangladesh Occupational Therapy Association

CRP- Centre for the Rehabilitation of the Paralysed

H.S.C- Higher Secondary Certificate

ICDDR,B- International Centre for Diarrhoeal Disease Research, Bangladesh

MDT- Multi Disciplinary Team

OT- Occupational Therapy

OTs- Occupational Therapists

QCA- Qualitative Content Analysis

RIHD- Rehabilitation Institute and Hospital for the Disabled

S.S.C- Secondary School Certificate

WHO- World Health Organization

WFOT- World Federation of Occupational Therapists

Abstract

Occupational Therapy undergraduate academic programs prepare a student for practice through developing their knowledge and skills. The knowledge and skill gained during the undergraduate course and the requirement in the work place both have to match to ensure the quality of graduate as well as the quality of the undergraduate education programmes. Occupational Therapists (OTs) have experienced about their undergraduate curriculum as well as their practice and they know how much their undergraduate learning can prepare them to meet the needs of their workplace. The purpose of this study is to explore the experiences of the OTs about how course curriculum of undergraduate Occupational Therapy program prepared them to work in Bangladesh through exploring the strengths and gaps of the recent curriculum. To conduct this study researcher had used qualitative methodology and the design of this study is Qualitative Content Analysis. The participants for this study were the Occupational Therapists who were graduates from the Bangladesh Health Professions Institute (BHPI) and now practicing in Bangladesh. From this study it was found that participants' show positive attitude about their curriculum. Most of the OTs think that clinical placement is the most important strength of the under graduate course curriculum that facilitate OTs to work in Bangladesh and most of the graduate OTs feel there is a gap in pharmacology and radiology subject in the undergraduate course curriculum for this they feel limitations during their practice in Bangladesh. Most of the OTs think that the OT B.Sc course curriculum is good enough to practice in Bangladesh and there is no need to remove anything in recent curriculum but it will be better if the identified gaps will include in the curriculum. This information will help to guide the development of the curriculum.

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1.1. Background of the study:

Occupational Therapy (OT) is quite a new health care profession in Bangladesh. In 1976 the first Occupational Therapists (OTs) in Bangladesh graduated with Bachelor degrees.(1) However, the number of the OTs did not increase significantly on the basis of need. In Bangladesh there are only 103 OTs who have completed their Bachelor degree. They have to serve 14,97,72,364 peoples in Bangladesh.(2)

Health care in Bangladesh is one of the most neglected and least prioritized service sectors compared with other developing country.(3) Government allocates only 5.4 percent of the budget to the health sector.(2) In the case of people with disability the situation is worse due to a severe shortage of therapy services.(3) Though 10% of people in Bangladesh have one or more kind of disability.(4) To improve the health of people with disabilities, of foremost importance is to develop a comprehensive therapy service.(3) According to World Development Report 1991, respectively 5546, 12549, 7620000 populations of Bangladesh are taking service from per phycians, nurse and therapists and this proportion highlight the therapist shortage in Bangladesh.(3) Therapy services will develop if the government support increases which will enrich the treatment of persons with disabilities in our country.

Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP) is the only academic institute in Bangladesh that offer an OT course since 1995.(5) After completing their graduation from BHPI, OTs provide service in different settings across different regions of Bangladesh for example national and international organizations and hospitals at home and abroad.(6) Every educational institution has its own curriculum and like other educational institution the B.Sc in OT course at BHPI has its own curriculum, it has to follow within the academic year to prepare a student to become a qualified Occupational Therapist. The curriculum is reviewed on an ongoing basis and 4 years Occupational Therapy programme revised at least after every 7 years. This review gathered from the different sources like feedback from the students, consumers, local Occupational Therapy association, senior therapist etc and the information are collected about the performance of graduates of the programme.(7)

Professionally based university program, such as those for OT, must continuously develop and alter their curricula to meet changing needs.(8) What is acquired in a health science university education and what is required in the workplace both have to match to ensure the quality of graduate as well as the education.(9) According to the World Health Organization (WHO), every educational programme that prepares health professionals for practice has to monitor the success of their graduate in meeting the local health needs. This explores how successfully they are in working within the local health service, for which they have been prepared. How a qualified therapist performs in local context that information are collected and informs that information's to the ongoing development of the educational programmes to improve its effectiveness.(7) So it is really very important to know the experience of the OTs in Bangladesh, about their university education to get them ready them for practice. The collected feedback about the university education or course curriculum will help the ongoing development of the curriculum or course to make the course up to date.

Previous researches held on United Kingdom (UK) and Australia to explore the perception of OTs about their undergraduate preparation for work in the workplace has found both positive and negative results.(9-11) One research indicate that OTs perceived significant gaps between the knowledge that they gained during their undergraduate course and those requirements in the workplace, particularly in the areas of communication with other health professionals and the general public, knowledge of the health industry and workplace management.(9) Some studies indicate that the graduates viewed themselves as prepared for practice.(10, 11)

In Bangladesh there is no research to explore the OTs experience about their undergraduate course curriculum to prepare them for practicing in Bangladesh. The researcher is interested to know the OTs experience about their under graduate course curriculum to prepare them for practicing in Bangladesh which might be helpful for further recommendation.

1.2. Significance of the study:

After completing the OT academic programme successfully a student become an Occupational Therapist and enter into a competitive workplace where their competence depends on their academic programme. It is very important to know the experience of the Occupational Therapist about how the course curriculum of the undergraduate programme prepared them for practice, from this we can understand or evaluate the curriculum effectiveness in preparing qualified Occupational Therapist for practice. From this study the researcher explored how the course curriculum of the undergraduate OT program prepared an Occupational Therapist to work in Bangladesh. This was by exploring the strengths and gaps of the current curriculum as well as gathering the recommendations of the Occupational Therapist to deduct or include something in the curriculum. This information will help to evaluate the curriculum. Through this evaluation the identified strengths may facilitate to emphasis on existing strength and identifies gaps highlight the need for adaptation of the recent curriculum to make OT students as competent as possible for their future practice and recommendation of the OTs will help in ongoing development of the curriculum. This study will benefit the teachers as well as the undergraduate OT students. There are few studies globally to explore the OTs experience about their undergraduate course curriculum and how it helped them for practice, in case of Bangladesh there is no research on this topic. This study is the first in this field in Bangladesh.

1.3. Aim of the study:

To explore how the course curriculum of the undergraduate Occupational Therapy programme prepares an Occupational Therapist to work in Bangladesh.

1.4. Objectives of the study:

- To explore the strengths of the curriculum at undergraduate level that facilitates an Occupational Therapist to work in Bangladesh.
- To explore the gaps in the curriculum at undergraduate level for that Occupational Therapist feel limited their practice in Bangladesh.
- To explore the recommendation of the OTs about undergraduate course curriculum to prepare future students for better practice in Bangladesh.

2.1. Curriculum:**2.1.1. Definition of the curriculum:**

The word “Curriculum” derives from the Latin word “currere”, meaning ‘to run’.(12)

There is no agreed upon definition of curriculum. Some definitions of curriculum are:

The curriculum represents a set of desired goals or values that are activated through a development process and terminate in successful learning experiences for students.(13)

Struthers quoted Donald et al in his work(14) that curriculums include: content; the structure of the programme; the methods of teaching and learning; language or medium of instruction; methods and processes used in teaching; pace of teaching and time available; the methods of assessment and evaluation; learning materials and equipment; classroom organisation and management; as well as the process of what happens in school.

Bodegas quoted Allen in his work(15) that curriculum is a very general concept which involves consideration of the whole complex of philosophical, social and administrative factors which contribute to the planning of an educational program.

Curriculum refers to a written plan outlining what students will be taught, it also refers to all learning outcomes for which the institution is responsible and has processes for assessing the achievement of educational objectives.(16) Curriculum of an organization, needs to be developed in the light of the organization or context in which it is going to be delivered.(12)

The OT undergraduate course curriculum at BHPI represents a set of desired aims or goals. This curriculum include: course content and in every subject or topic there are specific methods of teaching and learning, relevant learning materials are used for each subject and specific hours are allocated for each topic and under the each subject different methods and evaluation processes are available to assess the student.

2.1.2. Types of the Curriculum:

Several different types of curriculum are at work in the educational institution.(16-18) seven of them are listed below. It is important to know that like the definition of curriculum, there is no specific type of curriculum.

1. Recommended curriculum: The recommended curriculum is that which is recommended by scholars and professional organizations. They are most often presented as policy recommendations, lists of goals, suggested graduation requirements, and general recommendations about the content and sequence of a field of study.(16)

The World Federation of Occupational Therapists (WFOT) is the official international organization for OTs and Occupational Therapy worldwide and all the countries of the world that have their own OT education programmes, have to meet the WFOT minimum standards. The minimum standards will allow the educational curricula to be alert to the needs and demands of each country. There are some aims for educational programs of WFOT such as every country will have an OT educational program and there will be adequate qualified teachers; educational resources; access for quality education and post professional education; as well as a well functioning network among OT programmes all over the world.(17)

2. Written curriculum: The written curriculum is the curriculum that appears in state and locally produced documents.(18) The written curriculum is planned mainly to ensure that the educational goals of the system are being accomplished; it is a curriculum of control. Typically, the written curriculum is much more specific and broad than the recommended curriculum.(16)

Most of the things in the OT undergraduate course curriculum at BHPI like course aim, structure, course overview, assessment procedure, module description etc are documented in a written way.

3. Taught curriculum: Taught curriculum is that curriculum which teachers actually deliver day to day.(17)

An OT undergraduate course curriculum has specific course modules and content, which teachers deliver to the class. What will teach in the class it depend on the content and teacher interest.

4. *Supported curriculum*: The supported curriculum includes those resources that support the curriculum for example textbooks, software, and other media.(17)

The OT undergraduate course curriculum at BHPI have different relevant supported curriculum that are used for different topics for example in case of different topics teachers suggest the student learn from different textbooks that are available in the library.

5. *Assessed curriculum*: The assessed curriculum is that which appears in tests and performance measures for example standardized tests, teacher-made tests etc.(17)

Different types of assessment methods are used at BHPI to assess the OT student for example written examination, viva examination, course work, presentation etc that are included in the assessed curriculum.

6. *Learned curriculum*: The learned curriculum is the bottom-line curriculum. The curriculum that students actually learn.(17)

In the classroom teachers are teaching many things but a student cannot learn everything that is taught. What the student will learn depends on the student and sometimes on the teacher's skill.

7. *Hidden curriculum*: This is the unplanned curriculum. It defines what students learn from the physical environment, the policies, and the procedures of the institution.(17) For example, when a teacher has her or his desk at the front of the classroom and "teaches" from this area, the message that is being learned by students is that the teacher is in control, and is the center of attention.(16)

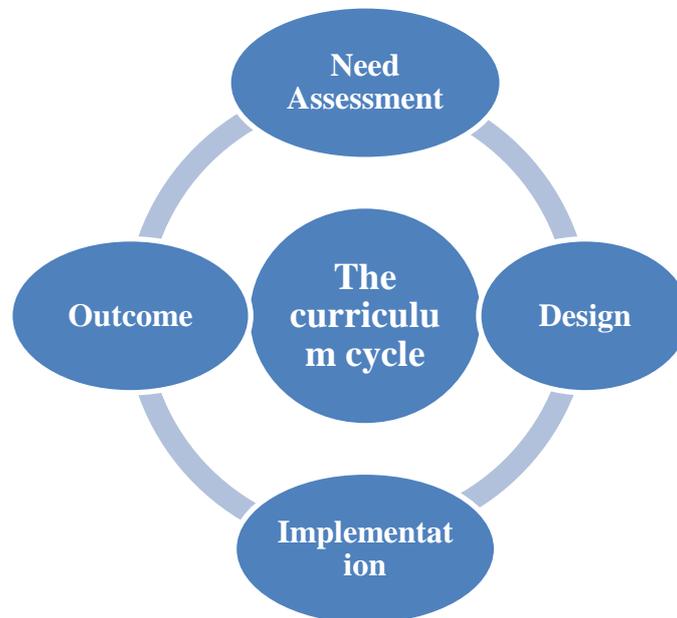
The OT undergraduate course curriculum at BHPI has various hidden curriculum for example is case of the therapeutic skills subject there are 200 hours are allocated for practical classes and 30 hours for lecture. Students learn from this that for this subject practical classes are more important than lectures.

There are varying patterns of influence among the types of curriculum. The recommended curriculum seems to have little influence on the written; the written curriculum seems to have a moderate influence on the taught curriculum and taught curriculum are much more influenced by the assessed curriculum, students are similarly sensitive to the assessed curriculum, teachers are perhaps most sensitive to the learned curriculum, making their decisions on the basis of students' needs. Every types of curricula are interacting with each other.(17)

2.1.3. The Curriculum Cycle:

Curriculum is a cycling process. McKimm quoted Peyton in his work(12) that the curriculum cycle involves development through needs assessment, design and implementation phases. After this, outcomes are reviewed and evaluated against the original needs assessment. Needs change with societal expectations. The emphasis on different aspects varies with the participants' and teachers' apparent needs. The dynamic curriculum requires change and resource management.

Figure 1: The curricular cycle (12):



According to the curriculum cycle it is important to design or develop a curriculum after completing a needs assessment then implement that design, after that evaluate or assess the curriculum outcome.(19)

2.1. 3.1. Curriculum development process:

Curriculum development is a complex process. At first a picture of an ideal graduate is developed: which knowledge, skill and values that will the ideal graduate will possess and what they will be able to do upon program completion is designed at first. Then planed the structure of the programme and is designed the educational experiences. After that Instructors design content, process, resources, and student assessment strategies etc.(19)

2.1.3.2. Implementation the curriculum:

When the curriculum has been developed and tested, it is ready for implementation. It is important to interpret the curriculum correctly to the persons those are involved because the written words are not always interpreted in the same way by the different people. The implementation process involves many teachers, other staff and student representatives to effectively implementing the curriculum.(12)

2.1.3.3. Assess or evaluate the curriculum:

After implementing the curriculum it is important to assess or evaluate the curriculum outcome. When developing programme competencies, it is important to consider how a programme can evaluate its success, and sometimes the same procedure are used for determining the programme objectives can be used to assess the achievement of them.(19)

2.2. B.Sc in OT course curriculum at BHPI in Bangladesh:

Like every other educational institution the OT B.Sc course has its own curriculum. In this study undergraduate course curriculum means OT B.Sc course curriculum at BHPI. The researcher gathered OTs experience on the basis of this curriculum.

In Bangladesh the OT course has been developed to create well qualified Occupational Therapist who is capable to apply their clinical and academic skill in the perspective of Bangladesh. The course provides the knowledge that will help the student to develop their ability to transfer skill and become competent during their professional lives.(20) There are some requirements for admission in this course: average grade points combined of 7.0 for Secondary School Certificate (S.S.C) and

Higher Secondary Certificate (H.S.C) are required and individually not less than 3.0 grade points in either S.S.C or H.S.C.(6) A mandatory entrance examination is held and candidates need to pass this examination to enter the course.

This course consists of five years (four teaching years and one year internship). One teaching year consists of two semesters each of which is 23 weeks long. The total numbers of weeks are 184.

Occupational Therapy B. Sc course in Bangladesh has several aims like providing a framework to build up students core skills in OT and develop: sense of responsibility, problem solving skills, holistic thinking, self reliance, management skills, values and attitudes, clinical reasoning, creativity and critical thinking etc to enable a graduate to become a competent Occupational Therapist in the context of Bangladesh.

The frame work of Occupational Therapy B. Sc course curriculum in Bangladesh is, in first year exploring the clinical skills (basic medical subjects), introduction to the theory of OT and overview of clinical conditions. In second year there is a direct application of the previously learned clinical knowledge on particular area. Third year has a theoretical and practical basis; providing professional services to the wider community. In fourth year developing advanced therapy, management, teaching and research skills and fifth year consist of full year internship within the CRP.(20) Under every subject there is specific course content, learning objectives, different teaching as well as assessment method and time. It is valuable to consider the learning objectives and then determine the content and structure needed.(19)

Table 1: Overview of the curriculum of Occupational Therapy B. Sc course at BHPI(20):

1st Year		2nd Year	
Semester-1	Semester-2	Semester-1	Semester-2
Anatomy-1	Anatomy-2	Neuroscience	Adaptation and Design
Physiology-1	Physiology-2	OT in Paediatrics-1	OT in Paediatrics-2
Kinesiology-1	Clinical placement(2 weeks)	OT in Psychiatric	OT in Neurological Conditions
Pathology-1	Surgical and Medical conditions	OT in Physical Dysfunction	Clinical placement (6 weeks)
Psychology	Health issues	Clinical Placement(4weeks)	English
Basic Human Development	OT and the upper limb	Therapeutic Skills-3	
OT Theory-1	OT Theory-2	English	
Therapeutic Skills-1	Therapeutic Skills-2		
English	English		
3rd Year		4th Year	
Semester-1	Semester-2	Semester-1	Semester-2
Management-1	Teaching Method	Report Writing	Research-3
Community Culture and Disability	Research-1	Research-2	Teaching Skills and Education
Ergonomics	Program planning	Teaching skills	Advanced Rehabilitation-2
Therapeutic skill-5	Professional development	Advanced Rehabilitation -1	Reflective Practice
Clinical placement(8 weeks)	Clinical placement(8 weeks)	OT, Disability and Rehabilitation	Management-2
		Resource File	Resource File
5th Year is a year of internship in the OT department of CRP			

Occupational Therapy educational program consist of both academic and practical components and fieldwork experience is the practical component of the curriculum, which is sometimes, referred to as ‘clinical education’ and through these the role and function of the Occupational Therapist can be developed and integrated.(21) Placement enables students to gain working experience in different clinical setting and treatment modalities.(22) Clinical education is an integral part of OT education.

According to OT B. Sc curriculum at BHPI a student has to spend 28 weeks (minimum 1,000 hours) on clinical placement in different settings.(20) Clinical placements are arranged in the setting where an Occupational Therapist has role as well as has potentiality and scope to work.

Table-2: Placement resources of Occupational Therapy B. Sc course, at BHPI:

Year	Weeks	Specialties	Place
1 st year	2	Spinal Cord Injuries (observation)	CRP
		Paediatrics (observation)	
		Neuromusculoskeletal (observation)	
2 nd year	10	Spinal Injuries	CRP
		Paediatrics	
		Neuro-musculoskeletal	
3 rd year	16	Psychosocial	Shishu Polli Plus
		Mental Health	National Institution of Mental Health
		Physical Medicine	Dhaka Medical College Hospital
		Community Based Rehabilitations.	Thana Health Complexes.
4 th year	4	Area chosen by the student.	Selected by student where OT has potentiality and scope to work

Throughout the five years, students' competencies must be demonstrated or assessed to show development of the student as a competent Occupational Therapist. Assessment procedures are an essential part of the course and reflect the course aims rather than evaluating the student learning ability. Different types of assessment methods are used in BHPI for example, written exam, essays, reports, dissertation, verbal presentation in a various setting, practical exercise and oral viva exams. Students must be present at a minimum of 80% of the course. Annual written and oral viva examinations are conducted and assessed by both external and internal examiners. If a student fails a formal examination he or she have to sit in a supplementary examination within one month after result but still he or she will continue studying with peers. The student must pass in every assessment and the pass

marks is 50%. After completing four academic year and one year internship a student graduates as an Occupational Therapist.(20)

2.3. Occupational Therapy education in Bangladesh:

After the end of glorious war of liberation in 1971, many war-affected civilians needed rehabilitation.(23) To assist the Bangladesh government in 1972 professor R. J. Garst, an American orthopedic surgeon and specialist in the field of rehabilitation, arrived in Bangladesh and in 1973, professor Garst started the first school for OT at the Rehabilitation Institute and Hospital for the Disabled (RIHD) from here three students completed their bachelor degree in OT at 1976 . The course was terminated in 1978.(3)

In 1995, CRP restarted an OT diploma course in Bangladesh. Following this, the course was upgraded in 1999 to a B. Sc (Honors) degree course at BHPI, the academic institute of CRP under the medicine faculty of the University of Dhaka. The first batch of B. Sc (Honors) in OT students were admitted in 1999 and completed their graduation in 2003 and the course has since been continued.(6) Current total seat capacity is 30.(5) Besides this a big number of diploma completed OTs did their conversion to B. Sc by doing another additional 4th year.

The Occupational Therapy B. Sc (Honors) degree course at BHPI was recognized by the WFOT in 2000 and last reviewed by National Association in **2007**.(6)

Until December 2012 in BHPI, there are a total of 108 students studying in B. Sc in OT course; number of male student is 30 and female student is 78.

2.4. Occupational Therapy practice in Bangladesh:

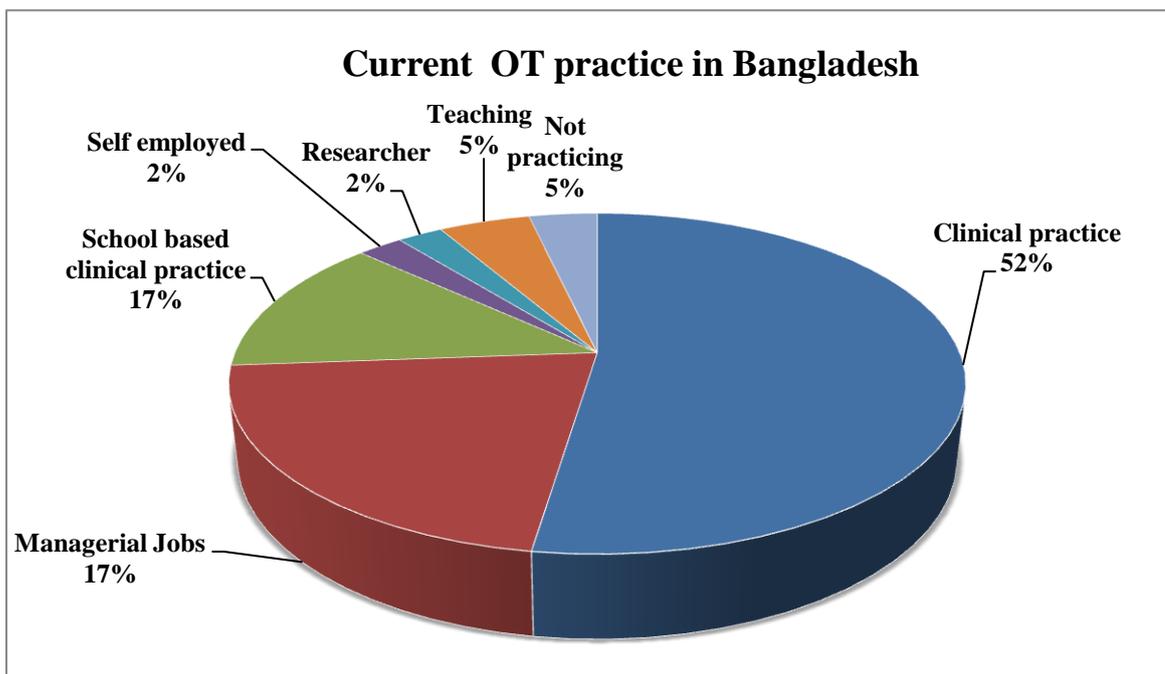
In 1976 the first Occupational Therapists in Bangladesh graduated with bachelor degree. Unfortunately, out of three graduates, two left Bangladesh after only one year.(1) Because of profitable opportunities, in the abroad and lack of recognition in Bangladesh.(3) Only one trained Occupational Therapist, Josene Ara, remained in the country and she served as an Occupational Therapist until her death in 2000.(1)

Bangladesh Occupational Therapy Association (BOTA) was established in 1999. The work of BOTA is to promote and enhance the activity of the OT profession in

Bangladesh. It received registration by the Government of Bangladesh and also received recognition from WFOT in 2000.(5)

According to N. Nahar, Assistant Professor (written communication, March 2013) in 2012 there were 103(male 54 and female 49) qualified OTs in Bangladesh who graduated from the B.Sc in OT course at BHPI; 19 graduates were overseas and 84 graduates are now practicing in Bangladesh

Figure-2: Current Occupational Therapy practice in Bangladesh:



Clinical practice: The OTs who directly provide treatment to patients maintaining the OT process of assessing the patient, setting intervention plan, providing intervention, evaluating, discontinuing and providing recommendations to the patient. For example the OTs who are working in Paediatric, Inpatient and Neuromusculoskeletal unit in CRP or in different hospital etc.

Managerial jobs: The OTs who playing a managerial role: planning, organizing, coordinating, guiding and controlling etc. Such as program manager, country coordinator, program coordinator etc

School based clinical practice: The OTs who working in different inclusive or special schools as a clinical OTs and provide needed treatment like hand skills practice, Activity of Daily Living (ADL) training, sensory integration therapy and arrangement of the classroom etc. For example the OTs who are working in different inclusive or special school like Autism Welfare Foundation (AWF), Proiyash, Tori foundation etc.

Self employed: The OTs who practicing independently through their own organization, clinic, and special school.

Researcher: The OTs who fulfill the responsibilities as a researcher through conducting research. For example the OTs who are working in International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B).

Teaching: The OTs who working as a teacher in the OT department at BHPI.

Not practicing: The OTs who completed their graduation from BHPI but are not currently practicing.

The study aim is to explore the experience of the OTs regarding the course curriculum of the undergraduate OT program and how it helped to prepare them to work in Bangladesh. Because of the exploratory nature of the study, the qualitative methodology was selected. Participants were selected through convenient sampling. Data was collected through face to face interview using a semi structured questionnaire and Qualitative Content Analysis (QCA) was used to analyze the data.

3.1. Study Design:

Qualitative methodology was selected for this study. Qualitative research methodology focuses on individuals' lived experiences as they are presented in thoughts, ideas, feelings, attitudes and perceptions. It explores the quality of experience, not the quantity.(24)

Qualitative research is exploratory in nature by which the researcher can gain insights into another person's view, opinion, feeling and beliefs within their own natural setting.(25) Qualitative data are in depth descriptions of circumstances, people, interactions, observed behaviors, events, attitudes, thoughts and beliefs and direct quotes from people who have experienced or are experiencing the phenomenon.(24)

Qualitative Content Analysis was selected as the study design as it facilitates contextual meaning in text through the development of emergent themes and it is a widely used method to bring out the meaning from text and qualitative data is usually in the form of text like interview transcriptions.(26) It also may be derived through manifest content, whereby participant's actual word form concepts or through latent content, whereby concepts are derived from the interpretation and judgments of participant's responses.(27)

In this study the experience of OTs about their course curriculum was explored through interview and generated themes about their experiences.

3.2. Study Population:

The population of the study was the OTs who have completed their B. Sc degree from the BHPI, CRP, Savar, Dhaka and are now practicing in Bangladesh.

3.3. Participant selection procedure:

Convenient sampling was used to select the participants for this study. Convenient sampling is also referred to as volunteer or opportunistic sampling and involves the enrollment of accessible participants as they enter the study until the preferred sample size has been fulfilled.(28) In convenient sampling, the researcher selected participants conveniently according to the needs of the study, while it is also cost effective which is beneficial for the researcher.(29) Through this procedure researcher selected 7 graduates as the participants for this study.

Table-4: Participants' characteristics:

Characteristics	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Sex(Male/Female)	F	M	M	F	M	F	M
Year of Passing	2010	2009	2008	2009	2008	2010	2010

3.4. Study setting:

The workplace where the participant OTs were working that time.

3.5. Field test:

A field test was completed with one participant before starting the final data collection to refine the data collection plan as well as questions. From the field test the area were identified where the participants had faced difficulty to understand. One question was identified that was difficult to understand and the question was modified. The result of the field test was helpful for the researcher to finalize the questionnaire in case of both Bangla and English questionnaire.

3.6. Data collection:

The researcher collected data through face to face interviews with semi structured open ended question. In the semi-structured interviews the questions are open ended thus do not limit the interviewees choice of answers, the purpose is to provide an atmosphere where the interviewer and interviewee can discuss the topic in detail and the interviewer therefore can make use of cues and prompts to help and direct the

interviewee into the research topic area thus being able to gather more depth or detailed data set.(26)

3.6.1. Data collection tools

- A voice recorder was used to record the interview of the participants.
- Information sheet and consent form were used to take permission from the participants.
- A semi-structured question was used to conduct the interview.

3.6.2. Ethical Consideration:

The researcher took permission from the supervisor and course coordinator of the Department of Occupational Therapy, BHPI to conduct the research. Additionally the researcher took permission from each participants by using consent form with explaining information sheet, aim, object and significant of the study and also informs them that they would be free to withdraw from the study at any time if they wish. In every stage of the study the researcher ensured the participants confidentiality. The researcher also informed participants that their information will be published but their name and address will not be used. Participants were also informed that they will not be harmed from the study and may not be directly benefited.

3.6.3. Data collection procedure:

The researcher herself meet with the participants and explained the purpose of the research and spoke with them to make sure that they were voluntarily willing to participate in the study then participants were requested to fix a time and a place for the interview.

On the selected time, before starting the interview the researchers built rapport with the participant through some informal conversation then researcher give an explanation of this research and answered the participant query about the study. The researcher gave participants an information sheet and consent form to take his or her permission to participate in the study. After taking permission the researcher began the interview. The researcher also asked some accessory questions to find out the in depth answer. All interviews and discussions were recorded because it was harder to write every question and answer in detail. The interviews were held in Bengali. The

place for the interview was selected by the participant's interest a calm environment was ensured before starting the interview.

3.7. Data analysis:

Researcher used Qualitative Content Analysis to analyze the data. Qualitative Content Analysis is a powerful data reduction technique; it is a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding. It has the attractive features of being unobtrusive, and being useful in dealing with large volumes of data.(30) According to qualitative content analysis data was analyzed by 3 stages first coding then categorizing and last one is generating themes. Coding began through reading the text several times to find out the master codes. Key concepts in the interview questions would form the master code. Similar pieces of code or ideas was fall into a particular category.(31) Analysis of all master codes were coded into established categories and finally themes were generated through establishing core themes within each main category.(27)

The researcher started the data analysis with the transcription of the interview in Bengali from the voice recorder, the Bengali transcript were translated into English. The researcher completed two translated copy of the transcript; one copy is translated by the researcher and another copy of data translated by the volunteer group. The researcher checked the accuracy of both transcript copy and translated copy to check that the meaning in transcript copy and translated copy were the same. Then the data was analyzed by qualitative content analysis according to the procedure described above. The researcher read the translated copy several times to find out the participants actual words. After analyzing the each participant words researcher developed some codes and from those codes the researcher developed 5 categories. The researcher developed categories on the basis of the objectives of the study. At last the researcher find out the most important codes that most of the participants were responses and from that researcher developed the themes of the study and finally the researcher developed 3 themes from the study.

The results and discussion are described in same chapter, this is common practice in qualitative studies(32) In this research the researcher presented result and discussion in the same chapter.

4.1. Result of the study:

Theme-1: Most of the OTs think that placement is the important strength of the undergraduate course curriculum that facilitates OTs to work in Bangladesh.

Theme-2: Most of the OTs feel, there is a gap in pharmacology and radiology subjects in the undergraduate course curriculum, they feel this resulted in limitations during their practice in Bangladesh.

Theme-3: Most of the OTs think that the OT B.Sc course curriculum is good enough to practice in Bangladesh and there is no need to remove anything in recent curriculum but it will be better if the identified gaps will include in the curriculum.

4.2. Table-3: Overview of the Data analysis and Result:

Objectives	Questions	Themes	Categories
1. To explore the strengths of the curriculum at undergraduate level that facilitates an Occupational Therapist to work in Bangladesh.	Questions: 1 and 3	Theme-1: Most of the OTs think that placement is the important strength of the under graduate course curriculum that facilitates OTs to work in Bangladesh.	Category-1: The strengths of undergraduate OT course curriculum that facilitates a graduate OTs to work in Bangladesh. Category-2: Some aspects of under graduate learning experience that most benefit to practice.
2. To explore the gaps in the curriculum at undergraduate level for that Occupational Therapist feel limited their practice in Bangladesh.	Question: 2	Theme-2: Most of the OTs feel there is a gap in pharmacology and radiology subjects in the undergraduate course curriculum, they feel this resulted in limitations during their practice in Bangladesh.	Category-3: The gap of undergraduate OT course content that cause unfamiliar to work in Bangladeshi setting.
3. To explore the recommendation of the OTs about undergraduate course curriculum to prepare future students for better practice in Bangladesh.	Questions: 4 and 5	Theme-3: Most of the OTs think that the OT B.Sc course curriculum is good enough to practice in Bangladesh and there is no need to remove anything in recent curriculum but it will be better if the identified gaps will include in the curriculum.	Category-4: The things that need to be deduct from undergraduate course curriculum. Category-5: The things that need to include or elaborate in undergraduate course curriculum.

4.3. Discussion of the study:

In this section it has possible to understand the participants opinion by content analysis, where used some categories. Under the different categories OTs different opinion is different codes. The researcher organized the codes in table and each table describes the interview findings. The tick was given only for those columns where the participants agree with the opinions or codes and here ‘P’ is used for participant.

4.3.1. Table-5: Category-1

Category-1: The strengths of undergraduate OT course curriculum that facilitates OTs to work in Bangladesh.

Codes	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Placement	√	√	√	√	√	√	√
Internship	√		√				√
Different assignment			√	√			√
Management subject				√	√		√
Program planning subject				√	√		
Report writing subject				√	√		
Learn about holistic approach			√				
Client center practice			√				
Medium of learning is English	√						
Every important topic those are essential for practice is available in the course content.					√		

Placement is an excellent opportunity for a student to learn about their role as an Occupational Therapist in different settings and gain knowledge about what skills are needed to become a competent and qualified Occupational Therapist. Most of the participants said that placement is a very important strength of undergraduate OT course curriculum. They said-

“Our all placement from 1st year to 4th year are a big strength of our curriculum and from those placements we learned lots of things.”

One participant said that-

“Our placements from 1st year to 4th year are very important strength in our curriculum; from those placements we learn lots of essential things such as patient handling, time managements, professionalism, client safety and how to work in the Multi Disciplinary Team (MDT) etc and everything that I learned from my placement helped me in my practice.”

Placement experience is the practical part of the curriculum, that provides students opportunity to develop a variety of skills.(21) Placements introduce OT student to a number of different practice areas in a variety of settings.(22) Placement enables students to experience diverse clinical setting and treatment modalities.(33) A high proportion of OTs consider placement to have had the most influence on their practice preference.(22)

After completing four academic years successfully a student will start internship within CRP and it is great opportunity for a student to learn and improve their skill and make them qualified for future competitive work place and three participants said that-

“Our internship is also strength of our curriculum.”

One participant said that-

“Our internship of one year is a big strength of our curriculum, during internship we had to perform our duty as an Occupational Therapist and those experiences help me further in my practice.”

Internships are just as necessary as medicine in Occupational Therapy.(34) The literature indicates a positive relationship between internship and job site selection for physicians.(35)

Within four academic years students have to complete many assignments on different topics which are important way to learn in depth and up to date information about those topics. Three participants mentioned that the different assignments are the strength of the curriculum.

One participant said that-

“From 1st year to 4th year we have to complete lots of assignment and from those assignments we can learn in depth and updated knowledge on specific topics.”

Neistadt quoted Spencer in his article(36) that students feel mentally flexible with assignments that make them analyze and solve problems rather than focusing too much on the memorization of detail and multiple choice thinking .

Managerial skills are crucial for an OTs in his or her practice in all settings. Three participants mentioned the management subject as strength of the undergraduate curriculum.

One participant said that-

“As an Occupational Therapist we not only handle the patients but also we have other managerial activities. To complete the managerial activities my previous knowledge about management subject helps me and this is also strength of our curriculum.”

In previous research it was found that OTs felt less competent in workplace management and they felt that their undergraduate course had not prepared them on this aspect and it was the weakness of their undergraduate curriculum.(9) In case of Bangladesh graduate OTs mentioned management subject as the strength of their curriculum.

Two participants stated specific subject: program planning and report writing as strengths of the B. Sc OT course curriculum.

Previously a research was conducted to identifies non-clinical competencies required in the workplace for physical therapists, 35 competencies are identified in 5 major areas: marketing, program planning, management, training and understanding the organization those could be used by the therapist for self assessment.(37)

Other participants reported other strengths of the curriculum are: holistic approach, client centered practice, English as a learning medium and every important topic those are essential for practice available in course content and those are really strength of undergraduate course curriculum.

Participants mentioned several strengths of OT B. Sc course curriculum and the researcher noticed that most of the participants were interested and felt comfortable to discuss about the strength of the curriculum rather than talked about the gap of the

curriculum. Most of the participants emphasized the placement as strength. Overall most of the participants felt positive about their undergraduate curriculum through focusing on different strengths.

4.3.2. Table-6: Category-2

Category-2: Some aspects of undergraduate learning experience that help most to practice in Bangladesh.

Codes	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Clinical placement	√	√	√	√	√	√	
Program planning subject	√	√				√	√
Report writing subject	√			√			√
Therapeutic skill subject	√			√	√		
Medical based subject				√	√		√
Teaching skill subject	√		√				
Management subject				√		√	
Adaptation and design subject					√		√
Ergonomics subject					√		√
Different practical session			√				
Presentation skill						√	
Occupational therapy related subject	√		√		√		
Most of the subject				√	√		√

Placement is a very important way for students to learn how to use academic knowledge in their practice and most of the participants said that their experience during their clinical placement helped them most for their practice. They said that-

“Placement in different clinical setting helps me very much.”

Placement education has been described as a central component of the OT educational experience as it integrated knowledge, professional reasoning, and behavior in practice, and aim to develop skill and attitudes to the level of competence required of a qualified therapist.(38, 39) Fieldwork is the most important factor influencing students decision to pursue an area of practice upon graduation, particularly those placements completed in the later part of the degree.(22, 40)

The Program planning subject is a very important subject in the OT curriculum as it focuses on evaluation of community needs, availability of resources and the effective use of this knowledge to promote the health and other specific identified needs in the community.(41) Four participants in this study mentioned that the knowledge about program planning helps in the practice.

Report writing is also a very important subject for the OTs. Three participants mentioned the importance of report writing subject on their practice.

Clear communication is necessary and report writing subject will help the student to expand the skill to communicate clearly in writing.(20)

Other participants also mentioned the following subjects that help them in practice: OT related subject, therapeutic skills, medical based subject like anatomy, physiology etc, adaptation and design, management, teaching skills, ergonomics, different practical session, presentation skills and three participants also said that most of the subject of OT curriculum help them to practice.

After completing graduation OTs work in different settings and on the basis of their work place or setting different subjects of undergraduate course helped them more for example Occupational Therapist who are working in a school setting they found paediatric related subjects and placements in paediatric unit helped them most in their practice though everything that is taught in the undergraduate level is essential for OTs to become competent.

4.3.3. Table-7: Category-3

Category-3: The gaps of undergraduate OT course curriculum for those graduates feel limitation during their practice in Bangladesh.

Codes	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Pharmacology subject is not present	√	√				√	√
Radiology subject is not present	√					√	√
Electronic modalities do not taught		√					√
Few practical class		√					√
Less focus on the spiritual aspect			√				
No gap in recent curriculum				√			
Less focus on emergent area					√		

It is important to know primary knowledge about medicine because during clinical practice OTs have to see clients previous medical record to plan treatment and medicine may have some side effects or contraindications that will impact the OT treatment. Four participants mentioned that-

“There had no pharmacology subject in our curriculum and for this we faced difficulty.”

One participant mentioned that-

“Many important subject is not present in our curriculum like pharmacology, radiology subject for this we faced difficulty to understand the prescription and report of the patient and set goal.”

The health care system, of which occupational therapy is a part, is dominated by medicine. By the 19th century Western medicine became the study of disease in terms of bodily structures and functions. Thus the elements of a balanced lifestyle and of human choice, which are essential to occupational performance, were de-emphasized.(42)

Client motivation on therapeutic activities is very important if clients are not motivated on activities it will be harder to get better outcomes so two OTs mentioned that do not teach electronic modalities are the gap in the curriculum.

One participant said that-

“In case of our country patients is more motivated on electronic modalities rather than functional activities and there is the gap in our curriculum that we do not teach electronic modalities as a subject.”

The health care environment is undergoing rapid change. This has major implications for health science education programs.(9)

Practical knowledge is a very important aspect of OT academic programs. Two participants said that the gap in the recent curriculum is that it has few practical classes. It was found in a literature that restricted time spent in developing practical OT skills is the limitation of curriculum.(10)

Other participants also mentioned other gaps are: radiology subject is not present in the curriculum, less focus on the spiritual aspect, less focus on emergent area of OT practice as gaps in the curriculum that limit graduates practice; one graduate said that there is no gap in the recent curriculum.

It is really very difficult to explain every single topic within one curriculum. The OT B. Sc course provide a framework that allows for the development of core skills in OT .(20) On the basis of these core skills a graduate become eligible to work in various setting, then according to the needs of the working setting a graduate is responsible to expand their knowledge. It is important to upgrade the curriculum on the regular basis with up to date knowledge as well as consider the needs of the country where the graduate have to work.

4.3.4. Table-8: Category-4

Category-4: The things that need to be deduct from undergraduate course curriculum.

Codes	P-1	P-2	P-3	P-4	P-5	P-6	P-7
No need to deduct anything in the curriculum		√	√	√	√	√	√
Competency examination in 4 th year need to deduct	√						

Most of the graduate mentioned that-

“There is no need to change in our curriculum but there is need to add and elaborate something.”

In a previous study it was shown that OT student were more positive about their curriculum and the program ability to prepare them for practice.(10)

Other graduate mentioned that the competency examination in 4th year needs to deduct from the undergraduate course curriculum. Participant said that-

“In 4th year when competency exam is held, during that time students remain busy with their research and they think this examination as a stress.”

In this study researcher observed that all the participants’ show positive attitude about their curriculum. Though one participant mentioned one recommendation to deduct and except this recommendation she also felt positive about their curriculum. Most of the participants prefer to include something more rather than delete in the curriculum.

4.3.5. Table-9: Category-5

Category-5: The things that need to include or elaborate in undergraduate course curriculum to prepare a student for better practice.

Codes	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Include pharmacology subject	√	√				√	
Include radiology subject	√					√	√
Increase practical knowledge	√	√				√	
Vast the content of medical related subject		√				√	√
Include Electronic Modalities		√					√
Include First aid management knowledge		√					
Placement in school setting	√						
Include Spiritual issues			√				
Include Leadership module			√				
No need to add anything in the Curriculum				√			
Working in an inter professional team					√		
Vast the information about emergent field of OT					√		

Basic knowledge about medicine is important for OTs and they felt this importance in their practice. In this study most of the graduate mentioned that-

“Pharmacology subject need to add in our curriculum.”

One participant said that-

“Pharmacology subject need to include in our curriculum because of the less knowledge about medicine we faced difficulty to explain the side effects of the medicine to the patient and sometimes patient or family members asked questions about medicine that time we faced difficulty so it will be better if pharmacology subject is included in the curriculum.”

Crepeau quoted Mattingly in his article(43) that OT as a two-body practice in which the therapist attends to the biomedical aspects of the disability as well as to the illness experience. The biomedical topics are physiology, pathology, and pharmacology.

In case of clinical practice, OTs have to see X-ray, MRI reports to understand the clients present condition and set goal but in B.Sc in OT curriculum there is no radiology subject. Three participants recommended including radiology subject in the curriculum, they said that-

“Radiology subject need to add in our curriculum.”

One participant said that-

“Most of the time patient comes with the previous prescription like X-ray, MRI and to understand those prescriptions I faced difficulty but it is important to understand the prescription to prepare intervention plan, so it is important to include radiology subject in our curriculum.”

The importance of practical knowledge for OTs knows no bounds and three graduates recommended increasing practical sessions, they said that-

“We need to increase practical session and arrange practical class immediate after theoretical class.”

In a previous study it was found that limited time spent in developing practical OT skill is a limitation of curriculum.(10) Lack of practical skills was found to sometimes increase the anxiety of new graduate OTs during their transition period from student to practitioner and within curriculum practical or technical skills need to continually review as they have the possibility to become quickly outdated.(44)

Another participant recommended to vast the syllabus of emergent field and said that-

“There have some area where OTs have great role like palliative care, cardiac rehabilitation, burn, disaster management etc but we have no in-depth knowledge about those setting and we need to vast those issues in our curriculum.”

OT has varied applications which is exemplified by the variety of settings in which OTs can work.(22) Diversity in position for OTs has implications for educational

programs to develop transferable skills that may be applicable to a number of practice setting.(45) If we emphasize on emergent fields of OT our working sector will expand and the profession will be develop.

Another participant recommended including knowledge about how to work in inter-professional team. Participant said that-

“How to work in inter-professional team those need to add in our curriculum cause during practice we have to work with other professionals in MDT team. Through a project this can add in our curriculum.”

In a previous study it was found that OT graduate felt difficulty to communicate with other health professionals and they indicated that it was the weakness of the curriculum to have less focus on this issue.(9)

Two participants suggested increasing the content of medical related subjects like anatomy, physiology, pathology etc.

Other participants mentioned the following recommendations that will be helpful for students to prepare them better for practice: arrange placement in school setting, including electronic modalities, including first aid management knowledge, including spiritual issue, add leadership issues in the course content and another participant said that there is no need to add something in the recent curriculum.

Most of the participants recommended including or adding those things, which they mentioned as the gap of the undergraduate course curriculum.

4.3.6. Additional discussion section that emerges from the study:

The OTs mentioned other strength of the curriculum that have no direct influence on practice but are important issues to give concern these are given below:

From an organized course curriculum a student can get better outcome. Four participants said that-

“Our curriculum is very organized from 1st year to 4th year.”

The B.Sc OT course consists of four academic year followed by a one year internship 1st year explores pre clinical skills and introduction to the theory of OT, 2nd year explores the application of pre clinical knowledge, 3rd year theoretical and practical basis and 4th year consists of advanced therapy, management, teaching and research skills.(41)

Assessment procedures are an essential component of the course and reflect its aims, assessment in this course was judge the student knowledge, therapeutic skills, information processing, presentation skills and capacity for reflective practice. Different types of assessment method are used to assess the student as a whole.(41) Two participants reported the assessment procedure of their undergraduate curriculum were strength of the curriculum.

The Occupational Therapy B. Sc (Honors) degree course at BHPI was recognized by the WFOT in 2000.(6) Two participants think it also the strength of the undergraduate curriculum.

Participants identified the following gaps that have no influence on the practice; they indicate those things only as the gap of the curriculum, these are given below:

Current Occupational Therapy B. Sc course curriculum at BHPI was developed in September 1998.(20) Two participants said that course curriculum is not up to date which is gap of undergraduate course.

To meet the requirement of the changing work place it is important to be up to date with recent knowledge so it is necessary to upgrade lecture notes continuously with recent and research based knowledge. One participant mentioned that-

“Our lecture sheets are not upgraded and need to upgrade with recent knowledge.”

Knowledge about health care is developed continuously and it is very important to introduce up to date information in the lecture notes on a regular basis. It is not good to confine the study within the lecture note because it is hard to include everything within a single lecture.

It is important to maintain a balance of workload and stress within the four academic years as it can have a negative impact on the student’s academic and personal lives .(46) Two participants said that-

“In our curriculum there have imbalance of stress and in first year there have lots of subject.”

According to B.Sc in OT curriculum there are 12 subject and 2 weeks placement in 1st year, in 2nd year 7 subjects and 10 weeks placement, in 3rd year 8 subjects and 16 weeks placement and in 4th year there are 7 subjects and 4 weeks placement.(41)

The first year of medical education is found to be more stressful, the reasons include academic pressure, unfamiliarity in a new environment and unrealistic expectations.(47) Other reports have however suggested that the 2nd and 3rd year is stressful.(48) A study in Thailand showed stress in 61.4% students, mostly in the third year, with examinations being the most important cause.(49) Curriculum lays a greater emphasis on memory, some students find this difficult and fall in stress.(50) Different to all these studies there are reports to suggest that stress is not related to any particular year.(51) In this study participants mentioned the imbalance of stress within their academic year.

Other participants also mentioned other gaps of the curriculum those are self directed learning time not use properly, no alternative options of research.

Participants also recommended other things for OT B.Sc course curriculum that have no direct involvement to prepare a student for practice but that will be helpful for the undergraduate student those are given below:

A professionally based university program, such as OT need to continuously develop and alter their curricula to meet changing requirements.(8) Three participants recommended upgrading the curriculum, they said that-

“Our curriculum needs to upgrade.”

It is necessary to balance academic pressure among all academic years. In this study three participants mentioned that there is imbalance of stress in the curriculum and it is necessary to maintain balance through 1st year to 4th year.

Academic reasons and emotional factors are greater during the first year while reasons related to patient care and physical factors are more important in subsequent years. Long working hours, lack of peer support, competitive environment, an imbalance between professional and personal lives etc maybe causes of stress.(50)

Another graduate said that-

“There is need to change placement supervision system through increasing the number of supervisors.”

The main aspect of placement that influences the student’ specialty choices are: positive and negative placement experience, placement supervisors, structure and timing of placement.(52, 53) Supervision can contribute to a positive and negative placement experience of the student.(52) Poor supervisory practice demands on supervisors such as limited staff time and resources may contribute to a negative placement.(54)

Other participants are recommended the following to include in the curriculum: upgrade lecture note, proper utilize of self directed learning time including some marks here, set specific ratio for male female student during admission, arrange visit under the report writing subject. Another mentioned some recommendation about research like doing research in a small group is more effective than doing it individually.

4.4. Limitation of the study:

When conducting research project, the researcher faced several limitations which are given below:

As this study is a qualitative study, convenient sampling was used to select the participants. When in-depth information is necessary that time small sample size is preferred. The findings of this study cannot be generalized to the entire graduate because the sample size is too small.

In this study only explores the experience of the graduate OTs who completed their B.Sc course and are now practicing in Bangladesh but did not explore the experience of graduates who are practicing in overseas or who were graduates from other health professions.

The study is presented in English however the interviews were conducted in Bengali for this reason sometimes it may be difficult to discover actual meaning of some information from the data translation.

There is a scarcity of published material dealing with therapy services in Bangladesh.(3) There were limited resources and information available in journals, Google search and books about the experiences of OTs about the course curriculum at undergraduate level. This is a new field of study within Bangladeshi context.

5.1. Recommendation:

Recommendations from this study are: student will be benefited more for their future practice if pharmacology and radiology subject will include in the course content and increase the number of practical session will be helpful for the student for better learning as well as better practice. It will be better if experiences of the OTs will be collected during curriculum development and it will be great if curriculum will be developed continuously to meet the changing needs.

Further research should be conducted with large number of participants on this study design and if researcher conducts the study with large sample size then it will be easy to generalize the result, further this study can be done through focus group discussion, in the next time this study can be done with the graduate who stay in the overseas, the survey about the graduate perception about their curriculum with quantitative method can also be conducted, a further study can be conducted through collecting both the graduates and the students perception about their curriculum using focus group discussion and both findings can be compared.

5.2. Conclusion:

The aim of the study is to explore how the course curriculum of undergraduate OT educational program prepares an Occupational Therapist to work in Bangladesh. From the result of the study it was found that all the participants' show positive attitude about their curriculum and great thankful about their teachers and most of the participants prefer to include more rather than delete from the curriculum. Several strengths, weakness as well as recommendation have come out through this study most of the participants put emphasized on their placement experience as the strength of their curriculum. Most of the participants felt gap in pharmacology and radiology subject. Participants recommended including these things, which they mentioned as the gap of the curriculum.

These findings will help to assess the curriculum and the recognized strengths may facilitate to emphasize more and the recognized gaps will help to highlighting the necessity of adaptation on those areas in the curriculum and recommendation of the graduate will help to continuing development of the curriculum. Overall Occupational Therapy B.Sc course curriculum is enough to make a student competent as much as possible for their future practice in Bangladesh.

(According to Vancouver referencing style in EndNote X4)

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Appendix

Appendix-1: Approval Letter

Date: 25-10-2012

To

The Course Coordinator,
Department of Occupational Therapy
Bangladesh Health Professions Institute
CRP, Savar, Dhaka.

Subject: Prayer for seeking permission to carry out the research project.

Sir,

With due respect, I beg to state that I am a student of 4th year B.Sc. in Occupational Therapy of Bangladesh Health Professions Institute (BHPI). As a part of my 4th year course content I have to conduct a research project and I am seeking permission to carry out the research project. My research title is "Experience of the graduate Occupational Therapist about the course content of undergraduate level to prepare them for practicing in Bangladesh". The aim of the study is to explore how course content of undergraduate OT program prepares graduates to work in a Bangladeshi setting. At present I am looking for your kind approval to initiate my research project.

So, I therefore pray and hope that you would be kind enough to give me the permission of conducting the research.

Yours obediently

Mir Hasina Aktar
4th year, B.Sc. in Occupational Therapy,
Department of Occupational Therapy
BHPI, CRP, Savar, Dhaka.

Approved by	Signature & comments
Course Coordinator and Supervisor: Mohammad Mosayed Ullah Assistant Professor & Course Coordinator Dept. of Occupational Therapy Bangladesh Health Professions Institute CRP-Chapain, Savar, Dhaka- 1343.	<i>Good luck with the study. Approved [Signature]</i>

Appendix-2 (Information sheet, consent form and questionnaire in Bengali)

Appendix 2.1

তথ্যপত্র

আমি মীর হাসিনা আক্তার বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট, এর অধীনে বি.এসসি অকুপেশনাল থেরাপী বিভাগের শেষ বর্ষের একজন ছাত্রী। চতুর্থ বছরে কোর্স এর অংশ হিসেবে আমাদের একটি গবেষণা করতে হয়। আমার গবেষণার বিষয় হল বাংলাদেশী সেটিং এ নিজেদের প্রস্তুত করার জন্য স্নাতক পর্যায়ে অকুপেশনাল থেরাপী বিভাগের পাঠ্যসূচি সম্পর্কে একজন অকুপেশনাল থেরাপীস্টের ধারণা। এই গবেষণার মূল লক্ষ্য হল কিভাবে স্নাতক পর্যায়ে অকুপেশনাল থেরাপী বিভাগের পড়াশুনা একজন অকুপেশনাল থেরাপীস্টকে বাংলাদেশী সেটিং এ কাজ করার জন্য প্রস্তুত করে তা খুঁজে বের করা। আমি আপনাকে আমার গবেষণায় অংশগ্রহণের জন্য আমন্ত্রণ জানাতে চাই।

এই গবেষণায় আপনার অংশগ্রহণ বাধ্যতামূলক নয়। আপনি চাইলে যে কোন সময় এই গবেষণা থেকে আপনার অংশগ্রহণ প্রত্যাহার করে নিতে পারেন। আপনি সরাসরি এই গবেষণা দ্বারা উপকৃত নাও হতে পারেন। আপনার সাক্ষাৎকার অডিও টেপ দ্বারা রেকর্ড করা হবে এবং তার গোপনীয়তা রক্ষা করা হবে। আপনার নাম, পদ মর্যাদা অথবা ব্যক্তিগত তথ্য আপনার অনুমতি ছাড়া গবেষণায় ব্যবহার করা হবে না।

আপনার যদি গবেষণা সম্পর্কে এখন অথবা পরে কোন প্রশ্ন থাকে তাহলে দয়া করে নিম্নে উল্লেখিত ব্যক্তির সাথে যোগাযোগ করবেন।

মীর হাসিনা আক্তার

৪র্থ বর্ষ

অকুপেশনাল থেরাপী বিভাগ

বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট,

সি.আর.পি,সাভার,ঢাকা-১৩৪৩

Appendix 2.2

সম্মতি পত্র

নিম্নের অংশটি পূরণ করবেন:

ক) অংশগ্রহণকারীর দ্বারা পূরণীয় (যথাস্থানে টিক চিহ্ন দিবেন):

১. আপনি কি তথ্য পত্রটি পড়েছেন? হ্যাঁ/না
২. আপনি কি প্রশ্ন করার বা এই গবেষণা সম্পর্কে বিস্তারিত আলোচনার সুযোগ পেয়েছেন? হ্যাঁ/না
৩. আপনি কি আপনার প্রশ্নের সন্তোষজনক উত্তর পেয়েছেন? হ্যাঁ/না
৪. আপনি গবেষণা থেকে যে কোন সময় নিজেকে প্রত্যাহার করে নিতে পারেন, এজন্য করো নিকট জবাবদিহী করতে হবে না, এ সম্পর্কে আপনি কি বুঝতে পেরেছেন? হ্যাঁ/না
৫. সাক্ষাৎকার থেকে সংগৃহীত তথ্যাবলী অন্য লোক দ্বারা নীরিক্ষণ করা হতে পারে কিন্তু সমস্ত ব্যক্তিগত তথ্যাবলী গোপনীয় থাকবে। আপনি কি তাকে আপনার তথ্য জানার অনুমতি প্রদান করছেন? হ্যাঁ/না
৬. আপনি কি এই গবেষণায় অংশগ্রহণ করতে ইচ্ছুক? হ্যাঁ/না

অংশগ্রহণকারীর স্বাক্ষর:

তারিখ:

খ) গবেষক:

আমি উপরোক্ত অংশগ্রহণকারীকে গবেষণা সম্পর্কে বিস্তারিত বর্ণনা করেছি এবং তিনি গবেষণায় অংশগ্রহণ করতে ইচ্ছা প্রকাশ করেছেন।

গবেষকের স্বাক্ষর:

তারিখ:

Appendix-2.3

প্রশ্নাবলী:

১. স্নাতক পর্যায়ে অকুপেশনাল থেরাপী বিভাগের পাঠ্যসূচির কি কি গুরুত্বপূর্ণ দিক বা Strength আছে যা বাংলাদেশী সেটিং এ কাজ করার ক্ষেত্রে একজন অকুপেশনাল থেরাপীষ্টকে সাহায্য করবে বলে আপনি মনে করেন?
২. স্নাতক পর্যায়ে অকুপেশনাল থেরাপী বিভাগের পাঠ্যসূচির কি কি ঘাটতি বা Gap আছে যার ফলে বাংলাদেশী সেটিং এ কাজ করার ক্ষেত্রে একজন অকুপেশনাল থেরাপীষ্ট প্রতিবন্ধকতার সম্মুখীন হন?
৩. আপনি কি দয়া করে স্নাতক পর্যায়ের পড়াশোনার কিছু দিক বর্ণনা করবেন যা আপনার কাজের ক্ষেত্রে আপনাকে সবচেয়ে বেশী সহায়তা করছে ?
৪. আপনি কি স্নাতক পর্যায়ের অকুপেশনাল থেরাপী বিভাগের পাঠ্য সূচিতে কিছু পরিবর্তনের বা Deduct করার পরামর্শ দিতে চান এবং তা কেন?
৫. আপনি কি স্নাতক পর্যায়ের অকুপেশনাল থেরাপী বিভাগের পাঠ্য সূচিতে কিছু পরিবর্তনের বা Include করার পরামর্শ দিতে চান এবং তা কেন ?

Appendix-3 (English translated copy of information sheet, consent form and questionnaire)

Appendix-3.1: Information Sheet

I am Mir Hasina Aktar, a final year student of B.Sc in Occupational Therapy Department at Bangladesh Health Professions Institute (BHPI). In 4th year of study it is mandatory to conduct a research project under the research subject to pass the B.Sc course. Title of my research is “Experience of the Occupational Therapist about the course curriculum of undergraduate level to prepare them for practicing in Bangladesh”. The aim of the study to explore that how course content of undergraduate occupational therapy program, prepare an Occupational Therapist to work in Bangladesh. I would like to request you to take part in the research.

Your participation in this study is voluntary. You have full right to withdraw yourself from the study at any time without hesitation. You will not be directly benefited from this study. Your answer will be recorded but confidentiality of all records will be highly maintained, your name, job status, or any personal information will not address in this research without your permission.

If you have any query now or later regarding this study, please ask the person stated below.

Mir Hasina Aktar

4th year

Occupational Therapy Department

Bangladesh Health Professions Institute (BHPI)

CRP, Savar, Dhaka- 1343

Appendix 3.2: Consent Form

a) To be completed by the participant:

1. Have you read the information sheet? Yes/No
2. Have you had an opportunity to discuss this study and ask any question? Yes/No
3. Have you had satisfactory answers to all your questions? Yes/No
4. Do you understand that you are free to withdraw from the study at any time, without having to give a reason? Yes/No
5. Do you agree to take part in this study? Yes/No

Participant signature _____ Date _____

b) Investigator

I have explained the study to the above participant and he/she has indicated her eagerness to take part in the study.

Investigator signature _____ Date _____

Appendix 3.3: Question

1. What do you believe are the strengths of undergraduate Occupational Therapy course curriculum that facilitates an Occupational Therapist to work in Bangladesh?
2. What are the gaps you think in undergraduate Occupational Therapy course curriculum for those an Occupational Therapist feels limitation during their practice in Bangladesh?
3. Would you please explain some aspects of your under graduate learning experience are of the most benefit to you in practice?
4. What would you recommend to deduct from the undergraduate Occupational Therapy course curriculum and why?
5. What would you recommend to include in the undergraduate Occupational Therapy course curriculum and why?