PARENT'S EXPERIENCE OF INFORMATION-SEEKING AND DECISION MAKING REGARDING COMPLEMENTARY MEDICINE FOR CHILDREN WITH AUTISM SPECTRUM DISORDER IN DHAKA CITY

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Session: 2020-2021



Bachelor of Science in Speech & Language Therapy

Bangladesh Health Professions Institute (BHPI)

(*The academic institute of CRP*)

Faculty of Medicine, Affiliated by

University of Dhaka

[January, 2026]

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Research presented to the

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[January, 2026]

APPROVAL

We certify that we have carefully read and recommended to the Faculty of Medicine, University of Dhaka, for the acceptance of this dissertation entitled "Challenges faced by Speech and Language Therapy services across Bangladesh."

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DECLARATION

I hereby declare that the research study titled "Parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City" is an original piece of work carried out by me under the supervision of Md. Sazzad Hossain, Bangladesh Health Professions Institute (BHPI).I confirm that this thesis has not been submitted, either in whole or in part, to any institution or university for the award of any degree, diploma, or other academic qualification. All sources of information, concepts, literature, and data used in this study have been properly acknowledged and cited according to the APA 7th edition referencing style. This research was conducted in full compliance with the ethical guidelines of the Institutional Review Board (IRB) of BHPI. I take full responsibility for the accuracy, originality, and integrity of the content presented in this thesis, as well as any errors or omissions contained herein.

Signature

……

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DEDICATION

This research is dedicated to **my beloved parents**, whose trust has always been encouraging, whose unwevering support lead me to go ahead and whose love was always there for the taking. They sacrificed, had wisdom, and believed in my strength. That is who I am today and who made this possible.

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LIST OF ACRONYMS

Abbreviation	Elaboration
APA	American Psychiatric Association
ADHD	Attention-Deficit Hyperactivity Disorder
ADOS	Autism Diagnostic Observation Schedule
ASD	Autism Spectrum Disorder
CAM	Complementary and Alternative Medicine
CARS	Childhood Autism Rating Scale
EBP	Evidence-Based Practice
EIBI	Early Intensive Behavioral Intervention.
LMICs	Low- and Middle-Income Countries
NGO	Non-Governmental Organization
SLT	Speech and Language Therapy
SLTs	Speech and Language Therapists
SLPs	Speech-Language Pathologists
USA	United States of America

ACKNOWLEDGMENT

The research project, "Parents' experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City," was completed, and I would like to thank everyone who contributed.

Firstly, I would like to express my sincere gratitude to my supervisor, Md. Sazzad Hossain, Assistant Professor & Head, Department of SLT, and Md. Monir Hossain, Lecturer, Department of SLT, for their excellent supervision, support, and encouragement during data analysis in this research project. Through their patience, experience, and insightful criticism, these individuals have greatly influenced this project and assisted me in overcoming challenges. In addition to our esteemed mentor teacher, Nahid Parvez, Assistant Professor, Department of SLT, for his unwavering support in the theoretical and practical teaching of research

I express my gratitude to every parents who took part in this research and generously shared their ideas, insights, experiences and personal opinion, which provided us with a rich study basis, this research would not have been feasible.

I would like to express my gratitude to the Bangladesh Health Professions Institute (BHPI) for providing me with the tools, academic support, and supportive research environment I needed to complete my study.

I want to express my gratitude to my family and also want to thank my friends for their understanding and for encouraging me to reach my objectives, especially Sourav Saha, Saif, Nepa, Jarin. I would like to express my gratitude to everyone who helped me finish this research, whether directly or indirectly. Overall, the road is still difficult but worthwhile.

I am lucky to have collaborated with such dedicated and motivating individuals as a consequence of my numerous efforts.

Thank you all.

ABSTRACT

Autism Spectrum Disorder (ASD) is a lifelong developmental disorder and parents commonly use complementary and alternative medicine (CAM) treatments, including those known to include exercise as part of their intervention part. In Bangladesh, particularly in Dhaka City, CAM is widely accessible through both formal and informal healthcare sectors, yet little is known about how parents seek information and make decisions regarding these treatments. This study explores parents' experiences of information-seeking and decision-making concerning CAM for children with ASD. A total of eleven parents were purposively selected as participants, and data were collected using semi-structured, in-depth interviews. The interviews were audio-recorded, transcribed verbatim, translated into English, and analyzed using Braun and Clarke's (2006) thematic analysis approach.

Data was collected through semi-structured interviews with parents of children diagnosed with Autism Spectrum Disorder (ASD). Thematic analysis revealed five key themes: (a)Sources of Information on Complementary Medicine (CAM), (b)Types and Frequency of CAM Usage, (c)Factors Influencing CAM Decision-Making, (d)Parents' Knowledge and Beliefs About CAM, and (e) Impact of CAM on Parents' Perceptions of Child's Progress in Therapy. Engaged in an invitation to public debate of international literature, and rooted within the pluralistic healthcare context of Bangladesh, this paper highlights several commonalities between countries: a high prevalence of CAM use; internet related and peer-based consultation-seeking; affective drivers for treatment seeking behaviour, and barriers regarding communication with health professionals. Results underscore the importance of culturally relevant provision of care, better quality medical communication on CAM.

Keywords: Parental decision-making, Complementary Medicine, Autism Spectrum Disorder, SLTs, Speech & Language Therapy

CHAPTER 01 INTRODUCTION

1.1 Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder symptoms of which involve deficits in social interaction and communication, as well as restricted, repetitive patterns of behavior, interests or activities("Autism spectrum disorder", 2023).The disease is commonly first diagnosed at an early age between age 2 and 5 in childhood, but never remitting through life manifesting with symptoms varying from mild to severe which characterized by being a spectrum disorder (Leisman & Melillo, 2025).Global rates of Autism Spectrum Disorder have skyrocketed over the last decade, where newly collected data in the US suggests that 1 in 36 children will now be diagnosed with this condition (Cruz, 2024). Despite a lack of complete knowledge as to the etiology of ASD, it is thought to be mediated by some combination of both genetic and environmental influences on brain development (Hodges et al., 2020). Early identification and interventions are important to improve the outcome, although no cure for autism currently exists, there are many treatments which help people to lead fuller lives (Alnasser, 2023). Families are essential, as they remain the most common source of support for people with ASD across the lifespan (Lord et al., 2020). Diagnosis of ASD is multifaceted using both clinical judgement and standardized assessments. Pediatricians are important to diagnosis of this condition, with high agreement found on what pediatricians suspect but less when they rule it out absent a multi-disciplinary team (Penner et al., 2023).

Several diagnostic procedures, including the Autism Diagnostic Observation Schedule (ADOS-2), and Childhood Autism Rating Scale, Second Edition (CARS-2), have been used to identify cohesive ASD symptoms derived from both observed behavior and parent report measures (Sanchez et al., 2020). Further, multistage EIBI screening protocols have been shown to improve the ASD detection rate especially in Spanish-speaking families emphasizing the need for culturally-sensitive methods (Sheldrick et al., 2022). Even the prevalence of ASD in Bangladesh is conditioned to a range of factors including urban–rural clustering, economic altitude as well as diagnostic facility (Faruk et al., 2023).

For intervention, the growth in popularity of complementary and alternative medicine (CAM) among parents, particularly among the parents of children with chronic illness or disability (like ASD), is driven by a variety of factors interacting on multiple levels including dissatisfaction with conventional treatments, culture-specific beliefs and the impact of social networks. Parents commonly resort to CAM when they feel the mainstream approaches are not good enough or out of their reach, in a quest for better quality of life for the child and a feeling that what happens next is within their control(Smith et al., 2020).The frontier of decision analysis the great betrayal one of the biggest stumbling blocks in personal decision making is that there is culture route to rely on a recent article revealed (Ernst & Fugh-Berman, 2002).The latter observation emphasizes the importance of there being trustworthy, evidence-based resources available for parents to use in making their decisions (Smith et al., 2020).Parents' choices for CAM in autism spectrum disorder and information seeking behaviour. After diagnosis, most parents actively seek information in order to make sense of autism, treatment choices and appropriate interventions that might benefit their child (Hebert, 2014). It is usually emotional and time consuming, as parents try to make decent decisions when faced with uncertainty and lifelong caregiving obligations.

Parents are known to use multiple sources for information in the decision to use CAM. These include healthcare professionals, webpages, the social media parent's group and parent support group, autism organizations, family and community/religious leaders (Kostagiolas et al., 2013). Although professional advice remains crucial, it is the relative ease of access and ability to share a personal experience that seems likely to have such an impact. But by turning to informal and digital sources, parents often are left with opposing information and anecdotal claims unverified scientifically. The majority of the literature investigates the CAM prevalence, or effectiveness of specific treatments, but there is little research on how parents access information, make choices and how these decisions impact on their relationship with SLTs. This gap is especially evident in South Asia where cultural prescription, extended family pressure and having appropriate services being accessed are distinct from the Western world. To provide culturally appropriate family-centered SLT, it is important to understand the viewpoint of parents themselves. In addition, few studies have examined how SLTs discuss CAM, the difficulties encountered and how they view their role in helping parents make informed decisions. As an aspiring SLT, I feel it is important to address these gaps in

order to foster a clinical practice that is ethical, compassionate and evidence based. This research is underpinned by clinical reasoning and the tenets of evidence-based practice. Through understanding how parents learn and decide with regard to CAM, SLTs can gain a better understanding of the driving motivations and beliefs behind these preferences. Such insight may enable therapists to discuss constructively, help parents find an appropriate balanced information, and trust in the therapeutic encounter. The findings will also help support SLTs in understanding where further education or clinical guidelines are required, thereby enhancing the quality of care for children with ASD. The present research was intended to add both to professional understanding and day-to-day clinical practice, enabling SLTs to design intervention approaches that are respectful of family views while permitting safe and effective work. The purpose of the present study is to investigate parents' perspectives on information-seeking and decision-making with respect to that of the use complementary medicine for children diagnosed with ASD, and how these experiences influence their expectation from, and interaction with Speech & Language Therapists. And to do so requires insight into the experiences of parents insights which are critical in developing awareness messages, policy development and guiding clinical communication as well as supporting parents' informed decision-making.

1.2 Significance of the Study

This study is important as it examines the multi-level social, cultural, and pragmatic aspects shaping parental decision-making regarding seeking complementary and alternative medicine (CAM) for children with Autism Spectrum Disorder (ASD) in addition to conventional health services. Traditional medicine and therapy services are today practiced alongside alternative treatment. So, knowledge about the mindset, and values that direct families in going to CAM is important in order to delivering effective, responsive and culturally relevant health services. Parents do not make their treatment decisions based only on professional medical advice. Rather, decisions are made under the influence of various external factors such as advice from family members, community norms, culture and religious beliefs.

The importance of this study rests in addressing parents' information seeking and underlying purposes influencing their decision making on CAM. By understanding how and why parents are seeking alternative treatments, therapists and other health workers will also gain a greater appreciation for the emotional, cultural and practical realities families must confront. This insight is important in the development of empathic, respectful and culturally sensitive clinical communication.

It allows SLTs to offer clearer evidence-based advice, whilst respecting parent's fears, beliefs and limitations instead of disregarding them. This is important research relevance not only to SLTs but for all health professionals working in mainstream healthcare. The healthcare provider is unable to deliver services effectively if the first requisite of knowing patients or caregiver group's service-seeking behaviour is not known or established. Identification of these behaviours will allow for service delivery models to be adjusted, trust to be increased and shared decision-making between families and professionals to improve.

Furthermore, the findings of this study are applicable in a wider context than just clinical practice, such as health policy and service delivery. Parental decision-making and CAM use could inform service provision, workforce development and public health communication for policy makers. Knowledge of the reasons behind CAM usage by families can help in the formulation of clearer guidelines, culturally appropriate information campaigns, and integrated care pathways which cover both biomedical and socio-cultural aspects. Evidence of this kind can inform policy

decisions on early intervention services, regulation and care pathways related to other therapies that families may pursue, as well as education for caregivers and interdisciplinary partnership. Eventually, by promoting safe intervention choices and minimizing the harm that misinformation can cause, such research contributes to family-focused ASD services at both clinical and policy levels through collaborative, integrative and culturally sensitive health care provision.

1.3 Research Question

What are the parents experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder?

1.4 Objectives

1.4.1 General Objective

- To explore parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder (ASD).

1.4.2 Specific Objectives

- To explore the sources from which parents obtain information about CAM for ASD.
- To identify the types and frequency of CAM used by parents for their children with ASD.
- To explore the factors that influence parents' decisions to use or not use CAM for their children with ASD.
- To understand their knowledge and belief regarding the use of CAM in managing ASD.
- To understand how the use of CAM affects parents' perceptions of their child's progress in speech & language therapy

1.5 Literature Review

The use of complementary and alternative medicine (CAM) is now a common religious practice among the parents of children with ASD. There was a long tradition of complementary medicine in ancient systems of healing but latterly, the situation has become more complex as traditional treatments converge or diverge with modern medical institutions. Complementary medicine, the so-called partner of conventional Western medicine, has historical origins predating modern history in several parts of the world especially in the Old World where it constituted an organized health care system and is now incorporated in medical studies (Oumeish, 1998). Parents often seek out this intervention as they believe conventional medical and therapeutic treatments are inadequate in the treatment of the complex constellation of behavioural, communication and developmental issues arising from ASD. It is widely used among children with autism spectrum disorder, although little is known about its epidemiology. In Europe, 47% of parents provided some type of CAM for their child with this condition, and diets and supplements were used by 25% (Salomone et al., 2015).

On the other hand, in Tamil Nadu only 19.24% of children with ASD received one or more complementary and alternative therapy and herbal/Ayurveda medicines were most commonly utilized (Narasimhan et al., 2020). In North America, a study identified that 75% of children with ASD received supplements most commonly multivitamins, vitamin D and omega-3(Trudeau et al., 2019). The most common interventions reported were special diets, vitamin and mineral supplements, fish oil, chelation therapy, acupuncture, homeopathy and sensory-based treatments. The information seeking behaviour of parents in Low- and Middle-Income Countries (LMICs) relative to the health and education of children is driven by an array of factors including socio-economic status, digital resource availability, cultural norms and formal as well as informal support structures.

Parents in LMICs typically receive informal health information from family, friends and community members which may be a mix of correct advice along with misinformation, especially when it comes to disabilities (Kurniawan, 2025). Parents were most influenced by hope of change, negative experiences with medication and dissatisfaction with available services. But the investigators said that for much of CAM, evidence-based science is still lacking, with few such as melatonin treatment

to help people sleep proving it has any meaningful clinical benefit. Further research has strengthened the extent of this intervention usage. Green et al. (2006) also identified that the use of this intervention was very common among families of children with ASD, but stated that it was frequently used in addition to conventional treatments rather than being an alternative. For parents, CAM was a way of being able to "do more" for their child having reached a perception of plateau of progress with conventional treatments. This belief adds to the continued use of this treatment with empirical evidence not widely supported.

It is essential to know how parents search information and decide on using CAM. In a large survey study involving 248 parents of children with ASD, Christon, Mackintosh, and Myers (2010) reported that over 70% of these parents had attempted at least one method. Parents of children with this condition were more likely to report using advice obtained from other parents, autism organizations, online forums and seminars rather than health care professionals when learning about CAM. Quite remarkably, many parents did not report the use of this interventions to their child's physician because of fear of being judged and/or the perception that professionals were ignorant in respect to this treatment.

Wong and Smith (2006) also found these types of patterns, noting that parents based their decision-making more on anecdotal success stories and peer advice than empirical evidence. "When my daughter first got ill, it was just a big game of trial and error," Parents found themselves dabbling with many different interventions trying to find something that would show a degree of progress. Parents' viewpoints on the efficacy are significantly related to continuation of CAM's use. Hopf, Madren, and Santianni (2016) reported up to 80.9% of parents used this interventions for managing children's behaviour, sleep problems or limited communication abilities linked to a diagnosis of autism spectrum disorder. Typical treatments were the administration of multivitamins, a gluten-free/casein-free diet, methyl-B12 injections, sensory integration therapy and melatonin. More evidence from Non-Western context shows an effect of cultural and structural features as well. These results imply that what parents tend to assess is not based on EBP warrants but on their experiences in daily care.

This is an example of subjectivity for the determination of effectiveness, but it also bears similarity to findings by Goin-Kochel and colleagues (2007) that parents often

chose interventions they thought were "natural" or with less risk. There is currently a lack of dialogue on CAM between the parents and health practitioners. Ostfeld et al. (2013) analyzed the use of CAM in families with children diagnosed with ASD and compared them to families with Attention Deficit Hyperactivity Disorder (ADHD) and it was 82% of ASD families compared to 19.5% of ADHD families. The parents of ASD children largely viewed this intervention as helpful and expressed frustration at the lack of professional involvement in discussions about it. Parents experienced better communication, behaviour and well-being-that motivated to continue the use. Similarly, Hanson et al. (2007) found that parents perceived a lack of support when they raised CAM as a topic in professional discussion, including speech & language therapists. Such a communication gap may potentially force parents to be more reliant on informal circulation and self-sourced information. Senel (2010) studied this treatment use in Turkish parents of children with ASD and found over reliance on dietary interventions, vitamins, probiotics, sensory integration therapies, and chelation.

In a qualitative study from Kazakhstan by An et al. (2020), in their study about parents' use of CAM and traditional healing practices. Decisions were heavily based on informal networks, cultural norms and anecdotal evidence and less on professional guidance. Similar results were reported by Liu et al. (2014) in China, this treatment use by parents of children with autism was largely influenced by traditional health beliefs and lack of access to specialized autism services. These work may serve as an indication that CAM use may be indicative of more overarching social and healthcare system limitations. Hebert (2014) has shown that parents' decisions regarding interventions change over time and are influenced by parental beliefs, the child's behavior or characteristics, financial practicality as well as fit with family routines. The attitude of the parents towards this treatment is dynamic. A diagnosis brings relief as parents search for answers a diagnosis prompts an information-gathering frenzy, followed by a quest for treatment that may not do any good.

Decisions are taken and reconsidered on the basis of believed responses of children, and also what is practical. This dynamic process is consistent with the approach of Ryan and Cole (2009) who characterized parental decision-making as a process that evolves over time to develop a re-evaluation of options rather than one definitive choice. The challenges are furthered by the complicated nature of CAM information

environments. Kostagiolas et al. (2013), practitioners are an important source for parents, although they are followed closely by online sources. The majority of the parents experienced information overload, contradictions and difficulties in judging the credibility. These challenges are even greater in CAM settings where online marketing and personal accounts dominate. Likewise, Hall & Riccio (2012) pointed out that parents had difficulty discerning evidence-based recommendations from commercially based CAM information, and concluded it could put them at risk for making ill-informed decisions. The decision process of this treatment among parents is well described by the theoretical models. Lorenc et al. (2009) summarized several models and favoured Andersen's Socio-behavioural Model.

This model suggests that CAM use is determined by predisposing factors (beliefs and cultural values), enabling factors (income, access to services and information) and need factors (perceived severity of ASD and unmet needs). Indeed, research suggests that parents choose autism interventions, including this treatments, on the basis of affordability, accessibility and cultural acceptability; treatment effectiveness is only one factor on this subjective hierarchy (Carlon et al., 2014), given that efficacy of services aligns with family values and parent observations of progress rather than empirical evidence.

In conclusion, research in this field indicates that the use of it among parents with a child diagnosed with ASD is high, emotionally motivated, culturally determined, and significantly influenced by informal sources of information. Parents evaluate response by observation and they might not all be willing to report CAM use and visit health care providers, leading to a lack of knowledge and deterioration in care. Whilst there is comprehensive evidence from international studies, there has been an obvious shortage in empirical research to inform understanding on CAM-information seeking and decision-making among parents of children with this condition in urban areas like Dhaka, Bangladesh. Considering the pluralistic health care system in Bangladesh, strong cultural and religious influences, and low availability of SLT services in comparison to the rate of use by women, this gap indicates a need for qualitative study like this one.

1.6 Operational Definitions

1.6.1 Autism Spectrum Disorder (ASD)

Autism Spectrum Disorder (ASD) is a pervasive neurodevelopmental disorder characterized by persistent deficits in socialization across multiple contexts, and impaired, repetitive patterns of behavior, interests or activities. These symptoms are present early in childhood and cause disturbances with functioning every day, and depending on the intensity or effects of their expression may vary from one person to another as it is a spectrum disorder (American Psychiatric Association [APA], 2022).

1.6.2 Complementary Medicine

Complementary medicine, sometimes also known as complementary and alternative medicine (CAM), is a wide field of health care practices that are not generally included in the medical training or practice. They are acupuncture, herbal medicine, yoga, tai chi, meditation, chiropractic manipulation, religious healing and homeopathy among others. (Xu & Chen, 2012; Grossman, 2011). Other forms of medical care are seen as "complementary", that is, not part of a country's mainstream medicine. Evidence-based complementary medicine can play a role in augmenting mainstream medicine and provide greater well-being of the people (WHO, 2019).

1.6.3 Parental Experiences

Parental experience is multidimensional and it is constituted by emotional, social and developmental components, has been proved in various studies. People usually say it is a journey with an inner psychological and outer sociological component. For instance, parents who are raising non-diagnosed children experience an emotional journey that went from discovery, testing to coping-like responses and their relationship with professionals/third sector (Lewis et al., 2010).

1.6.4 Information Seeking

Information seeking is the complex task of actively seeking information and retrieving information that fulfils certain needs or overcomes uncertainty. It's all kinds of things, from searching and deciding what you need to presenting, gathering up, winnowing and then picking bits out of the things that come at you variously as people data and tech ("Investigating the Information-seeking Be....", 2023).

1.6.5 Decisions Making

Decision making Decisions making is a complex matter which is essential for every person and an organization too. It's searching, weighing options and making the best decision given a few alternatives. It plays a critical role in problem-solving and managing, since it sets an organization up to tackle things that have gone wrong, as well as capitalize on opportunities and effect solutions that work. (Al-Shibly, 2023)

CHAPTER 02 METHODOLOGY

This chapter describes the methodology used to accomplish the study's goals. This study investigated the Parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City.

2.1 Study Design

This study used a qualitative phenomenological research design. The aim of the study to explore parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder (ASD). For this study, the researcher used qualitative thematic analysis. Creswell (2013) and Patton (2015) define data triangulation in qualitative research as the utilization of multiple data sources. Demographic information, field notes, reflective journals, and in-depth semi-structured interviews were included as additional data sources. This approach facilitated a thorough understanding of the studied phenomena (Patton, 2015). This qualitative research strategy enables the researcher to examine data from various sources and provide a comprehensive and detailed description of the study phenomena (Carter, Bryant Lukosius, DiCenso, Blythe & Neville, 2014).

2.2 Sampling

The participants were chosen through a purposive sampling method. In purposive sampling, the researcher will choose the sample according to the researcher's judgment. The case was selected intentionally for the study. However, purposive sampling necessitates careful consideration of the population parameters relevant to choosing a sample case. According to Galanty (2000: Purposeful sampling) (337), the researcher utilizes their judgment to choose a sample that they know will provide them with the required data rather than simply studying accessible to anyone. Sampling for statistical purposes is representative and usually used in small-population qualitative research.

Harviland (1996:4-10) asserted that 4-12 individuals are essential for qualitative research. It will give a representative picture of such a small number of participants. Due to this, the researcher sourced data from qualified SLTs who could achieve the study's purpose as per the inclusion criteria. Purposive sampling strategies help illuminate the experiences of selected individuals and groups, theories, and concepts.

Under these conditions, a sample group of eleven participants was chosen for this study.

2.3 Study place

The study was also done in Govt. Homeopathic Medical College & Hospital (GHMC&H) and Govt. Unani and Ayurvedic Medical College & Hospital (GUAMC).

2.3.1 Study population

The subjects of this study were the participants of parents of a child with ASD who have experience using CAM in different areas of Dhaka city.

2.3.2 Informed Consent

The consent form was prepared in English {Appendix- 1(a)} and in Bengali {Appendix-1(b)}. By having interested participants sign a formal consent form, the researcher was able to obtain their approval. Furthermore, the researcher needs to reassure each subject that taking part in the study had no impact on them. Information about the participants was also kept confidential by the researcher and will never be disclosed to third parties. The participants were informed by the researcher about the study's use of the interview data. The participant might withdraw at any time, and the researcher assured them that their addresses and names would remain anonymous throughout the study.

2.3.3 Field Test

In order to gather data, the researcher first carried out a field test with two participants. For the researcher to evaluate the data collection plan, the field test must take place during the last stage of data collecting. During the interview, the researcher informed the participants of the objective and aims of the study.

This evaluation made it easier to find mistakes and shortcomings in the surveys. To improve openness, clarity, and suitability for participants and the study, the researcher reorganized the questionnaires. The participants' understanding issues were made clear by the field test. Time constraints prevented the data from the participant interviews from being evaluated. In evaluating the suitability of the data collection procedure, the researcher extrapolated the interview setting and participants' answers. The responses to these particular questions help the researcher adjust the questions as necessary. This also helps to reorganize the questionnaire's framework. The questionnaire was created in both Bengali {Appendix-2(b)} and English {Appendix-2(a)}, and it followed a set format.

The data was first gathered by transcribing the field test's audio recording. Afterwards, the translation was made into English. The field test helped the researcher create a plan for gathering data and a number of methods for asking probing questions to get accurate answers from the participants. Creating a strategy for gathering data and using a variety of questioning and probing methods to get precise answers from the participants about the event.

2.3.4 Inclusion criteria

- Parents who have a child with ASD (under 18 years of age).
- Parents who had used CAM.
- Participants who are willing to take part in this study.

(Smith et al., 2020)

2.3.5 Exclusion criteria

- Parents of children with other disabilities.
- Children who have not confirmed diagnosed with ASD.
- Unwilling to participate in the study.

2.3.6 Participants Overview

Parents of a child diagnosed with ASD were the study sample. The criterion was to include diverse experiences and interpretations of how information-seeking and decision making about complementary medicine were expressed for children with ASD. A total of 11 parents participated, whose children were at different ages and development stages. Participants all brought their differences of experience from their families, cultures, and socioeconomics, this diversity giving substantial data for inductive thematic analysis. 11 parents participated, representing children across various age groups and developmental stages. Each participant brought unique perspectives influenced by their familial, cultural, and socioeconomic backgrounds, contributing to a rich dataset for thematic analysis.

Table : Parents Overview

Participants	Age	Gender	Relationship with child	Educational Background	Occupation
1.	48	Female	Mother	Graduated	Housewife
2.	30	Female	Mother	Graduated	Housewife
3.	23	Female	Mother	SSC	Housewife
4.	27	Female	Mother	Graduated	Housewife
5.	28	Male	Father	Graduated	Employed
6.	40	Female	Mother	SSC	Housewife
7.	35	Male	Father	Graduated	Housewife
8.	35	Female	Mother	Graduated	Housewife
9.	29	Female	Mother	Graduated	Housewife
10.	26	Female	Mother	Graduated	Housewife
11.	30	Female	Mother	SSC	Housewife

2.4 Data collection

2.4.1 The Data-Collecting Instrument

A semi-structured, self-made questionnaire is used as a data collection instrument. The English questionnaire was converted into Bengali to ask the participants during the interview. Some other necessary materials, like a pen, pencil, white paper, and clipboard, will also be used at that time. The investigator obtained permission from each participant using a written consent form participant.

2.4.2 Data Collection Method

Questions from a questionnaire were asked to the individuals, and data was collected, which took around 15 to 20 minutes. Questions were answered in a general manner by the respondents.

2.4.3 Data Collection Procedure

First, the investigator explained to the participants the importance of conducting this research, the study's aim, and the study's objectives so that knowledge about the study is given to the participants. This would make the participant's willing to participate and answer the paper correctly. After that, the investigator explained how to fill out questionnaires and took the signature on the consent paper. The investigator set the sample for the qualitative part, and permission was requested to interview for about 15-20 minutes while maintaining confidentiality. To avoid disturbance, the interview section was done in a quiet room. A mobile phone was used to record the interview with participant's consent, and other information was recorded on paper.

2.4.4 Data Analysis

Thematic analysis was used to analyze the interview data since it allows for a more in-depth comprehension and precise description of the data collected. Finding the meaning of the data with research questions ends with identifying themes (Thematic Analysis, 2013). I followed the six steps of thematic analysis (Braun & Clarke, 2013). First, the student researcher discussed the analysis steps with the supervisors, described below dataset.

Step 1: Get Familiar with the Data

The researcher transcribed the audio-recorded interviews in Bengali verbatim. One of the first ways the student researcher familiarized herself with the data was by having a student researcher translate the interviews into English. The data were analyzed using the translated transcripts. As the student researcher translated, she understood the subjective meanings in depth. The critical points were marked with highlighters.

Step 2: Generating the initial Codes

Transcripts in this step, the student researcher produced the initial codes by writing the meaning of the highlighted points. The student researcher and supervisors also discussed how the initial codes will be developed. All the informative features were systematically coded throughout the data set. I noticed that there was a consistent way that they wrote down what the same or similar features meant. For example, when the student researcher wrote the meaning of the initial codes for similar responses by different participants to the same question from the interview guide, he used the same word.

Step 3: Searching for tentative Themes.

In this phase, the student researcher writing codes and line numbers from every interview on sticky notes. Those with similar ideas were then grouped by laying the sticky notes on a wall to see what potential themes might work. This process was repeated for each interview.

Step 4: Reviewing Themes

These preliminary themes were then reviewed against the coded data and also against the data set as a whole in order to check for consistency. This also enabled the development of a preliminary thematic map, which was then reviewed with supervisors. This stage allowed for a set of themes, as well as subthemes, to emerge, including five key themes.

Step 5: Defining and Naming Themes

The same themes were elaborated, but given in a way that presents the core of participant experiences. Every theme, subtheme, has been defined, named, and described. This has helped in developing a comprehensive theme structure that provides a narrative parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City.

Step 6: Producing the Report

Finally, at the last step of the analysis, the student researcher began to create the report based on the interpretation made by centering on the evidence that answered the research question. The essence of the themes was put in the report, and quotations from the participants were used to clarify subjective messages from the participants and to understand them by the researcher.

2.5 Ethical Considerations

- Ethical clearance was obtained from the Bangladesh Health Professions Institute Institutional Review Board in advance of data collection, and this ensured the moderation of ethical principles and institutional guidelines relevant to the study design, data collection, and analysis.
- Obtain informed consent from all participants before data collection, ensuring confidentiality and anonymity.
- Follow ethical principles and standards for the conduct of research in which human beings are subjects, out of respect for persons, beneficence, and justice.
- Privacy and confidentiality of sensitive data obtained in the research process should be ensured.

CHAPTER 03 RESULT

The study findings presented in this chapter are titled "Parents' experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City,". The results come from a thematic analysis of interviews with parents of children who have an ASD diagnosis. A qualitative descriptive research approach was used to analyze the data so the findings are grounded in the participants' perspectives. The participants' experiences and insights are represented in direct quotes and are faithful to the themes and sub-themes presented systematically. Furthermore, the findings are related to the study's objectives so that they are aligned and clear.

3.1: Overview of Themes and Subthemes

The analysis revealed five major themes, each one discussing a particular aspect of the way parents perceived and experienced screen time use in children with autism spectrum disorder. These themes are:

- Sources of Information on Complementary Medicine (CAM)
- Types and Frequency of CAM Usage
- Factors Influencing on CAM Decision-Making
- Parental Knowledge and Beliefs About CAM
- Impact of CAM on Parents' Perceptions of Child’s Progress in Therapy

Main findings are discussed in sub-themes that include some associated aspects as a mean of exploring the data.

Theme	**Sub-theme**
1. Sources of Information on Complementary Medicine (CAM)	- Family and Peer Recommendations
	- Online Platforms and Social Media
	-Health Professionals (doctor/Therapists)
2. Types and Frequency of CAM Usage	- Types of CAM Used
	- Frequency of CAM Usage
3. Factors Influencing on CAM Decision-Making	- Desire for Quicker Results
	- Influence of Family and Community
	- Financial and Logistical Barriers
4. Parental Knowledge and Beliefs About CAM	- Understanding of CAM Effectiveness
	- Belief in the Healing Power of CAM
5. Impact of CAM on Parents' Perceptions of Child's Progress in Therapy	- CAM as an alternative Treatment
	-Impact on receiving Speech Therapy

3.2 Theme 1: Sources of Information on Complementary Medicine (CAM)

This theme identified the multiple sources parents used to get information on the management of ASD through CAM. The information-seeking behavior of parents was majorly informal, experiential, and guided by trust as opposed to scientific validation. The news used to circulate via personal connections and the internet, healthcare leaders being a minor part.

3.2.1 Subtheme 1: Family and Peer Recommendations

Majority of the parents found their initial exposure to CAM via their family members, relatives or peers, especially other parents whose children had ASD. Such sources were deemed to be so reliable as they were founded on personal experience and emotional knowledge as opposed to theoretical medicalized descriptions.

"I first heard about homeopathy from some mothers at the special school where my child is enrolled. They told me their children became calmer after using it."

(Participant 1)

Equally, the religious and spiritual therapies were brought in mostly by family customs and elder counseling.

"I heard about religious medicine from family members, and they advised me to try it for my child."(Participant 10)

The parents indicated that observing or hearing that other children were improving had a very strong impact on their decisions.

"Parents who shared their own experiences of reduced restlessness influenced me the most."(Participant 8)

This sub-theme shows that experience often superseded scientific or professional advice. Peer to peer advice provided emotional support and practical advice in instances where parents were not sure or where support was not available in formal healthcare systems.

3.2.2 Subtheme 2: Online Platforms and Social Media

The social media and online platforms turned out to be a significant source of information about CAM. The parents reported to use Facebook groups, use of videos on YouTube, and online autism forums to educate themselves on various CAM

practices and the experiences of others.

"I learned about homeopathy from a video of a homeopathic doctor on Facebook talking about autism."(Participant 11)

Parent support online groups were also marked.

"I learned about acupuncture and homeopathy from a support group for parents of autistic children on social media."(Participant 9)

To a number of parents, these websites bridged an information gap that existed due to insufficient time to consult with the professionals.

"Through Facebook groups, I found many parents sharing what worked for their children, which helped me decide."(Participant 5)

Despite the availability of the online resources where accessibility and emotional support were available, parents tended to realize that there were doubts concerning the reliability, a factor where online information was not regulated and evidence-based.

3.2.3 Subtheme 3: Health Professionals (doctor/Therapists)

Doctors, therapists, or physiotherapists were reported by some parents to give them information related to CAM. Nevertheless, CAM was not commonly presented as a key intervention and was commonly expressed with restraint.

"I first learned about CAM from a pediatric and adolescent specialist's video on Facebook."(Participant 6)

Others learned indirectly through therapy consultations.

"When I consulted doctors and physiotherapists, they said regular sessions could help reduce restlessness."(Participant 7)

Many parents also said that professionals did not strongly recommend or discourage CAM and left parents to find other sources of information.

"The doctor mentioned CAM might help, but he did not strongly recommend it, so I looked for other opinions."(Participant 3)

This sub- theme demonstrates that, although the professional input was accorded the respect it deserved, it was not very explicit as it needed to be that demanded parents resort more to informal and online resources.

This theme addresses the research questions -To reveal the information sources that are utilized by parents to learn about CAM in ASD. The findings justify that the majority of the parents, in the first place, relied on informal and experience-based sources of information and not on evidence-based and professional guidance. The majority of the information regarding CAM was obtained through family members, peers, online, social media and with a relatively minor contribution by healthcare professionals. Three primary factors were established to determine the perception of this treatment in parents, including, but not limited to, interpersonal recommendations, digital information-sharing tools and selective professional input. Whereas parents valued experience and emotional support through peers and online communities, they reported that the issue of reliability of such sources came into question. This theme demonstrates that trust, access, and lived experiences greatly contributed to the information-seeking behavior of parents and largely surpassed the influence of scientific validation in deciding whether or otherwise to use CAM.

3.3 Theme 2: Types and Frequency of CAM Usage

This theme describes how CAM therapies are diversified when they are administered and when and how they are administered. Parents relied on experimentation, accessibility, cultural beliefs and symptom improvement in making decisions.

3.3.1 Subtheme 1: Types of CAM Used

Parents mentioned a variety of CAM, most of which used homeopathy, then religious or spiritual healing, and acupuncture. The treatments were mainly employed in curing restlessness, hyperactivity, sleep issues, and behavioral problems.

"I have been using homeopathy for my child for about two months to reduce his restlessness." (Participant 1)

Some parent (Participant 04 & 08) have been taking homeopathy treatment for their child for about 3 months.

Religious treatments were often chosen due to strong faith and cultural practices.

"I have used religious treatment for two to two and a half years." (Participant 02)

"I have used religious treatment for one year for my child" (Participants03)

"I have been using religious medicine for my child for about one year." (Participant 10)

Some parents used acupuncture to address specific physical or behavioral issues.

"I used acupuncture for more than a month, and it helped reduce my child's restlessness." (Participant 7)

Some parents used a combination of CAM therapies in an attempt to achieve improved results.

"I used religious treatment first and then started homeopathy when I did not see much improvement." (Participant 5)
"I have used homeopathy for 2 years and acupuncture for 3 months" (Participant 06)
"Yes, I have been using acupuncture for 1 & half months and homeopathy for 15 days" (Participant09)

3.3.2 Subtheme 2: Frequency and Duration of CAM Usage

CAM usage patterns varied widely. Some parents used it for short trial periods, while others continued for several years.
"I have been using homeopathy for about three months, but I have not seen much change yet."(Participant 8)
Long-term use was also common.
"I have been using homeopathy for my child for about four years."(Participant 11)
The religious practices were mostly integrated in the everyday activities.
"Religious treatment was used regularly, especially when my child became restless." (Participant 10*)*
This kind of treatment would often be decided by cultural conviction or perceived relaxation.
This theme would answer the research objectives -" To establish the nature of CAM and prevalence used among parents on their children with ASD. The research indicates that parents used the various forms of this treatment, like homeopathy, religious or spiritual therapy, and acupuncture and the frequency and duration of use varied. The patterns of CAM use were diverse because they involved short term use, and long-term and regular use over a span of several years. All in all, this theme demonstrates that the application of this treatment by parents was multifaceted and dynamic and points to the

subsequent experimentation and persistence of the use in response to the perceived needs of their child as well as the management of the symptoms.

3.4 Theme 3: Factors Influencing on CAM Decision-Making

This theme portrays the interplay of emotional, social and practical issues in a complex way that affected the decisions of parents to give their children with autism spectrum disorder (ASD) complementary and alternative medicine (CAM). The decision taken by parents was not inspired by a single factor, rather it demonstrated a consistent emotional agony, social or other issues and problems that still prevailed in the availability of the conventional services.

3.4.1 Subtheme 1: Desire for Quicker Results

Parents often had words of frustration of the slow work of the conventional treatment and found CAM hoping that it will lead to a quicker improvement.

"The sessions are available after a long time. There is not that much availability. As a result, children also go out of control, and improvement come slowly."

(Participant 1).

"I wanted my child to recover quickly because his restlessness was very high."

(Participant 6)

The need to control their children and have them under control again inspired the parents to seek other avenues where they could get timely and consistent therapeutic help.

3.4.2 Subtheme 2: Influence of Family and Community

The choice of parents was not supported by one particular factor; they were influenced by the experiences and recommendations of their relatives, peers, and other parents with ASD whose success stories tended to strengthen the decision to resort to CAM.

Some parents reported that

"My family members advised me to try religious treatment, so I followed their advice."

(Participant 10)

"Other parents said their children improved, so I felt encouraged to try it."

(Participant 3)

The sub-theme indicates that the choice of the parents to use CAM was greatly defeated by the family members and other people in society. Recommendations of family members and support by other parents who reported good results developed an element of trust and confidence and parents tried CAM with reference to the experience shared and the perceived benefit and not necessarily to scientific evidence.

3.4.3 Subtheme 3: Financial and Logistical Barriers

Parents gave several practical reasons, including high costs of the conventional treatment (SLT), long queues, difficulties in transporting patients, and low provision of government-funded SLT services also served as the additional reasons behind CAM use.

"Therapy centers are far away, so I tried alternative treatment instead."(Participant 5)

"Private therapy is very expensive, and I cannot afford regular sessions."(Participant 6)

"The proper therapy schedule was not available, that is why I decided to take alternative treatment."(Participant 10)

This sub-theme deals with the financial and logistical impediments that the access of a group of parents to the conventional treatment (SLT). Regular therapy was hard to maintain because of high treatment cost, long queue, and difficulty in transportation. This forced parents to resort to CAM as an alternative to treat their children that is more affordable and manageable.

This theme is used in answering the research objectives -To investigate the aspects that determine parents choice to use or not use CAM on their children with ASD. The result indicated that a set of emotional urgency, social influence, and practical limitations influenced the choice of parents toward CAM use. Parents were driven by emotional distress due to the slow rates of therapy and behavioral difficulties to find faster alternatives. There were social factors, such as the presence of advice and support among the family members and other parents, which further supported the adoption of this treatment. Also, financial and logistical factors, including the high cost of treatments, lack of access to services, and transportation had impeded access to

conventional treatment (SLT). Combined, these factors emphasize the fact that CAM use was an emotional pressure and structural constraints coping response and decision-making behavior and did not indicate a rejection of conventional care.

3.5 Theme 4: Parental Knowledge and Beliefs About CAM

This theme looks into the manner in which the parents interpreted and perceived the use of complementary and alternative medicine (CAM) when treating autism spectrum disorder (ASD). Their perception of CAM efficacy and the attitudes that condition their belief in their treatments.

3.5.1 Subtheme 1: Understanding of CAM Effectivenes

Parents were also not as aware of scientific evidence. Some parent cited that
"I did not find scientific proof, but many people said it helps."(Participant 1)
Another parent cited that
"I do not think homeopathy is fully scientific, but I still tried it."(Participant 11)

Parents had diverse knowledge about CAM, and in many cases they had knowledge of its lack of scientific evidence and proceeded with its use. A good number of them were not ignorant of the fact that CAM was not well-researched and not taken as a scientifically effective treatment. Generally, this theme demonstrates the co-existence of doubt and hope in which parents undermined scientific knowledge with faith, lived experience, and the need to do all they could to facilitate the growth of the child.

3.5.2 Subtheme 2: Belief in the Healing Power of CAM

The parents in certain cases were attracted to the healing ability of CAM on the basis of faith, cultural beliefs and positive experiences provided by others. Although there was a lack of scientific evidence, CAM was seen as effective or at least safe, which prompted parents to use it in hope of a positive outcome of the situation with their child.
"Many people said that if this treatment is taken, he will get better, so I took this treatment with the hope that this is all." (Participant 02)
*"No, religious treatment did not seem scientific to me, but since I am a Muslim, I found it somewhat reliable with my faith in Allah."(*Participant 10*)*
This sub-theme indicates that belief in CAM was largely influenced by faith and

cultural values and positive experiences that others have. Even in the cases when parents knew that there was no scientific basis, they regarded CAM as non-harmful and worth doing and with hope and faith instead of certainty they would help their child get better.

This theme deals with objectives of the research -"To determine their knowledge and belief in relation to CAM usage in the management of ASD. The results indicate that the parents were told mixed and frequently constrained information regarding the scientific efficacy of this treatment. Many parents have not been persuaded by the fact that there was little empirical evidence to support CAM use but instead applied it because of their faith and cultural beliefs and their positive experiences as told by other parents. The awareness of limited scientific support and belief about the possible ability to cure or harmless nature were two important factors on which the understanding of CAM use was based among parents. This theme shows that skepticism and hope exist simultaneously, and parents were able to balance uncertainties with trust, faith and need to investigate all the available opportunities that would help their child's development.

3.6 Theme 5: Impact of CAM on Parents' Perceptions of Child's Progress in Therapy

This theme describes how the use of complementary and alternative medicine (CAM) shaped parents' perceptions of their child's progress in therapy. Parents evaluated the effectiveness of CAM mainly through everyday observations of their child's behavior and responsiveness rather than through clinical outcomes. Many parents reported noticing minor improvements, such as reduced restlessness, better sleep, or calmer behavior, which led them to view CAM as having some positive effect.

3.6.1 Subtheme 1: CAM as an Alternative Treatment

This sub-theme also brings out the attitude of the parents towards CAM as a supporting or complementary measure and not as a primary mode of treatment. The parents accepted that though this treatment occasionally assisted in behavior control, including enhancing calmness or sleep, it did not result in significant speech, language or communication gains.

A number of parents were given CAM as an additional therapy and they experienced that

"The hyperactivity of my child has decreased, and the crying has reduced, but there hasn't been significant improvement in speech development" (Participant 03)

"After using this treatment, my child's restlessness has decreased significantly, although no other changes have occurred." (Participant 07)

Another parent report that

"After taking these treatments, I have noticed some improvement in my child's behavior. He is less irritable and cooperative than before but his speech problems still remain."(Participant 10)

This sub-theme reveals that parents largely regarded complementary and alternative medicine (CAM) as a supportive or an adjunct treatment to Autism Spectrum Disorder, but not a treatment. Although a few parents noted that they observed improvements in some of the behavioral areas including less hyperactivity, less crying, and more calmness, the effects were not extensive in nature. Notably, parents always mentioned that CAM did not indicate any major positive changes in basic spheres of speech, language, or communication.

3.6.2 Subtheme 2: Impact on receiving Speech Therapy

Such a sub-theme is concerned with parental perception of the impact of CAM on the speech and language development of the child. This also depicts the level of importance that the parents attach to the services of speech therapy to their children in association with CAM treatment whether they are interested in receiving speech therapy services or not. It is noted that most parents as they pursue CAM treatment to their children are delayed when it comes to seeking speech therapy. The delay is frequently caused by the absence of adequate knowledge regarding which areas of the treatment of the child are the most urgent ones and thus parents tend to believe that the CAM should be the method of primary treatment. Consequently, children are not able to get early intervention that is essential in the development of their speech and language.

Majority of parents indicated that in the first place they applied CAM treatment to their Childrens over different periods of time and after that they are employing SLT treatment when there was little or no observable response in speech, communication, or expressive language ability.

"He became calmer, but there was no improvement in speech. Now I have taken SLT for my child to learn to speak, socialize, and be able to attend school." (Participant 3)

"I started this alternative treatment to help with speech development which helped to decrease restlessness has decreased significantly but no other changes have occurred with speech development for my child then I have taken speech therapy for my child because from an early age, my child had no speech."(Participant 07)

Some parents claimed that they did not refer to SLT since they were not aware that children with autism require SLT intervention. One of the parents also stated that they thought CAM treatment will produce improvement and, hence, they did not need speech therapy as well.

"I haven't taken speech therapy because I believe the child's issues are due to excessive mobile usage, and I think homeopathy and religious treatments will help."(Participant 05)

"I haven't taken speech and language therapy for my child because I haven't had the opportunity."(Participants 06)

This sub-theme suggests that the application of CAM usually affected the initiation and the receipt of speech and language therapy. Most of the parents used CAM as the main treatment mode and put off seeking SLT because of the lack of knowledge of the importance of the latter or the assumption that CAM would eventually result in a preferred outcome. The parents then resorted to SLT when no speech and communication gains were realized because they acknowledged that it was necessary to aid the development of their child.

It will respond to the research questions -"To determine the effect of using CAM on parents perception of their child progress in speech and language therapy The results indicate that parents mostly measured the effectiveness of CAM use in terms of their child behavioral change and not the outcome in terms of speech and language. Whereas CAM was viewed to have assisted in the reduction of restlessness, hyperactivity, and emotional distress, it failed to result in significant speech and communication improvements. The interest in CAM also affected the parents to pursue the speech and language therapy, where the initiation was delayed because of the lack of awareness or the assumption that the CAM treatment would adequately suffice. As time went by though parents saw the necessity in speech therapy when there is no expected speech and language gains. On the whole, this theme indicates that CAM influenced the views of parents as it provided them with short-term behavioral assistance as well as with the strengthening of the significance of timely and evidence-based speech and language intervention.

The following chapter is based on these findings whereby I discuss them as far as exists in the literature and theoretical frameworks to have a deeper insight on their implication.

CHAPTER 04 DISCUSSION

The study's findings, titled, "Parents' experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City," are discussed in this chapter concerning the research objectives, existing literature, and theoretical frameworks. This study examined parental source of obtain information about CAM, its types and frequency, influencing factors for decision-making to use it, parental understanding of knowledge and belief about it to manage ASD, and understanding use of CAM affects on parents' perceptions of their child's progress in SLT. Thematic analysis suggested five main themes:

1. Sources of Information on Complementary Medicine (CAM)
2. Types and Frequency of CAM Usage
3. Factors Influencing on CAM Decision-Making
4. Parental Knowledge and Beliefs About CAM
5. Impact of CAM on Parents' Perceptions of Child's Progress in Therapy

Each theme is explained, links between themes are described, conclusions are derived and limitations and research implications are outlined.

4.1 Sources of Information on Complementary Medicine (CAM)

The research objective of this theme was to explore the sources from which parents obtain information about CAM for ASD. The findings indicate that parents whose children have ASD turn to informal and experience-based sources to source information about CAM mostly. Family, peer referrals, and the internet, especially through the social media, are major factors influencing the choice of CAM among parents, and in most cases, more than the professional or scientific opinion. Parents stressed on experiential knowledge, especially the fellow parents of children with ASD who gave emotional support and practical advice. This is consistent with the recent studies indicating the key role of informal networks and peer support in health choices, particularly in cases when the formal healthcare provides inadequate information (Nicolini, 2017; White et al., 2013). Along with that, although healthcare professionals were considered to have the second role in the provision of CAM-related information, parents tended to use alternative sources, i.e., parent communities on the Internet and

social media platforms. This observation facilitates the increasing trend of digital health communities as the major providers of health-related information (Foster et al., 2019). Nevertheless, even with the availability and emotional consideration of these sources, parents were usually worried about the credibility of information on the internet that, in most cases, was not supported by any scientific evidence (Fraser et al., 2018). Through such inferences, the need of healthcare practitioners to engage digital communities to provide evidence-based and reliable CAM information to parents is emphasized, especially in the regions where formal healthcare is not easily accessible.

4.2 Types and Frequency of CAM Usage

The theme research objective was to determine the CAM used by parents of children with ASD in terms of the type and frequency and duration of use. The major findings show that parents had a wide variety of CAM most often being homeopathy, religious or spiritual treatments and acupuncture. The use of CAM was mainly adopted in the management of the behavioral symptoms that included restlessness, hyperactivity, sleeping problems, and the emotional dysregulation. The findings are in line with the findings of earlier studies that demonstrated that CAM is frequently adopted by parents who feel that conventional interventions are inadequate, unproductive, and sluggish in dealing with behavioral issues in children with ASD (Hanson et al., 2007). Specifically, homeopathy is widely used, and this practice indicates the cultural acceptance, availability, and perceptions of this intervention as low-risks among children in both high-income and low- and middle-income groups (Green et al., 2006).

Religious and spiritual therapies were commonly applied on a prolonged basis and were commonly encompassed in everyday caregiving practices. The same data can be found in the literature and it is noted that in culturally and religiously integrated societies, the practice of spiritual healing is not only considered as a strategy of therapy but also as a vital source of emotional reassurance and parental coping (Goin-Kochel et al., 2009).

Acupuncture is being used by some parents, which is indicative of an increasing interest in body-based CAM to treat some behavioral or physical issues of children with ASD globally. Nevertheless, as was the case in the past studies, there is little and inconclusive empirical data on the efficacy of acupuncture and many decisions made by parents are based on perceived short-term benefits instead of scientific evidence (Hyman and Levy, 2012).

The patterns of the use of CAM were significantly different, with some of them being short-term trials, and some of them being long-term use over a span of several years. This experimental and adaptive practice is consistent with previous results that parents often use trial-and-error, depending on combining various CAM and modifying the use depending on the perceived reaction of their child (Green et al., 2006). In general, the results indicate that parents who use CAM when raising children with ASD are not rejecting the conventional medical care system but, instead, show active caregiving and adaptive coping with challenges, which supports the idea of transparent and evidence-based communication between medical care providers and the family.

4.3 Factors Influencing on CAM Decision-Making

This theme research objective was to investigate the issues that determine the decision made by parents to use CAM when treating their children with ASD. The most important findings have revealed that emotional urgency, social influence and financial and logistical factors preventing access to conventional treatment (SLT) influence CAM decision-making.

These results confirm earlier research that parents have also resorted to CAM in situations when they feel that the conventional treatment are slow, delayed, or inadequate in overcoming short term behavioral problems (Hanson et al., 2007; Green et al., 2006). The need to achieve faster progress especially in the control of restlessness and behavioral control can be seen as emotional distress on the part of parents and the need to handle their coping strategies in time of uncertainty.

The factor of social influences was also influential in adopting CAM. Parents were under significant influence of advice and encouragement by family members, relatives and fellow parents of children with ASD. This dependency on experience instead of scientific knowledge is in line with the literature that has emphasized the role of social networks and peer influence in the process of medical decision-making about developmental conditions (Goin-Kochel et al., 2009).

Monetary and logistical limitation also enhanced the use of CAM. The access to the regular SLT services was limited due to the high prices of the private therapy, long queues, and insufficient access to the services supported by the government as well as the challenges caused by transportation. The same structural barriers were generally documented in ASD research, especially in low- and middle-income environments

(Liptak et al., 2008).

Such results indicate that the use of CAM was an adaptive coping mechanism to emotional pressure and systemic constraints instead of denial of conventional care. In line with other studies, the interest of parents in CAM is indicative of attempts to cope with the unmet needs of the current healthcare systems and the significance of enhancing the accessibility of affordable, timely, and family-centred SLT services and increasing the openness of communication between medical staff and families (Hyman and Levy, 2012).

4.4 Parental Knowledge and Beliefs About CAM

The research objective of this theme was to understand the parents' knowledge and beliefs regarding the use of CAM for managing ASD. The key findings indicate that parents often had limited and informal knowledge about the scientific effectiveness of this treatment. Although most parents admitted that there was no solid empirical evidence, they still applied this treatment because of perceived safety, perceived benefits based on anecdotal evidence, and need. The results are aligned with the earlier studies that explain this trend as informed uncertainty in which caregivers understand that there is a lack of scientific evidence and still undertake it because of hope and a want to do anything to help the child (Christon et al., 2010). Instead of considering CAM as a scientifically proven method of treatment, parents perceived it as a risk-free alternative that should be considered when conventional treatment did not provide any sure-footed results. Faith and cultural practices and social stories were the major determinants of belief in the efficacy of CAM. Like Jegatheesan et al. (2010), the parents had faith in CAM not due to its evidence-based, but to its similarity with spiritual values and cultural belief systems that gave them meaning, assurance and emotional support. That is why parents explained that CAM being harmless, and worth trying, is nevertheless something that questions all the scientific premises, and implies a rather low level of awareness of possible risks and a greater emphasis on perceived benefits.

Consequently, without evidence-based guidelines, they can form unrealistic expectation about the outcome of the treatment. The results also note that there are major gaps in the current healthcare systems. The prevalence of CAM implies that the emotional, informational, and accessibility needs of parents are not addressed by the

traditional services to the full extent and as a result, they would like to explore other providers to address these deficiencies. In such a way, the findings underline the relevance of to-balanced and culturally adequate guidance. Instead of rejecting CAM, medical practitioners ought to be evidence-based and respect the cultural beliefs of the families, religion, and expectations.

4.5 Impact of CAM on Parents' Perceptions of Child's Progress in Therapy

The theme research objective entailed trying to comprehend the relationship between the application of CAM and parent perception over their child development in speech and language therapy. The best results showed that the main category of parents evaluated the effectiveness of CAM in terms of day-to-day behavioral changes including less restlessness, less hyperactivity, better sleep and more relaxed behavior, instead of assessing it in terms of speech, language or communication output. The results align with other researchers who have postulated that parents tend to measure the success of the treatment on the observable behavioral control and not the improvement in the fundamental areas of development (Hyman et al., 2020). Parents also realized how much SLT is needed and they needed professional help when they did not see the expected improvements in speech and communication. This trend is consistent with the studies that demonstrate that myths regarding the effectiveness of treatment may result in the postponement of early intervention, which is essential to the proper language development of children with ASD (Zwaigenbaum et al., 2015).

The results highlight that CAM can offer some short-term behavioral assistance that creates the impression on the parents that they are making progress, but this does not substitute evidence-based speech and language therapy. Because the prompt, evidence-based instructions are essential, the results reveal the necessity of timely, focused, and accessible professional instructions and improvement of service delivery systems in order to make sure that the parents can differentiate between the short-term behavioral assistance programs and the ones that result into the meaningful developmental advancements.

CHAPTER 05 LIMITATIONS & RECOMMENDATIONS

5.1 Strengths and Limitations of the Study

Strengths:

- The study offered an in-depth look at parental perceptions and rich and nuanced experiences.
- Qualitative descriptive design provided flexibility in the data collection in that participants were free to share their perspectives.
- The diversity of the participants enhanced the strength and trustworthiness of the findings.
- This study was important to fill a substantial research gap, particularly in middle-income countries, as there is little research on CAM and ASD

Limitations:

- The number of the sample size was relatively small and it focused on a specific geographic region; thus, making it difficult to generalize more general conclusions.
- In this study, participants were only taken from Dhaka city and where parents are experienced CAM for their children with ASD.
- Cultural and/or socio-economic considerations could have affected parents' experiences on information-seeking & decision-making behaviour, thus limiting the generalization of these results.

5.2 Recommendations

After completing this study, the investigator explore the parents' experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City. In this study, the investigator used few participants. So, the investigator can use more participants for future study. Besides, the investigator used some selective questions in this studies. For future study the investigator can use more questions about CAM. Even further study can be conducted in outside of Dhaka city and also can be conducted on parents who only experienced CAM for their children and didn't use any conventional treatment (SLT).

CHAPTER 06 CONCLUSION

This chapter summarizes the study "Parents' experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City,".

6.1 Summary of Key Findings

The objective of this study was to examine parental experience of information-seeking and decision making regarding complementary medicine for children with ASD. Data were gathered through in-depth interviews with parents and analyzed thematically using a qualitative descriptive design. Key findings of the discussions are below here:

Parents described that child CAM information sources were largely informal and experiential (family, peers, and online communities) which were the influences of emotion & practical advice, had no scientific realiability. The tentative and cautious inputs from the healthcare professionals also resulted in a sense of confidence by parents to depend on digital, peer-based information. Although the internet made knowledge about CAM more accessible online, concerns still existed over misinformation. These results emphasize the need for better professional buy-in and evidence transparent guidance in clinical information/ digital health space.

Parents of children with ASD also utilized multiple CAM, including homeopathy, religious/faith healing and acupuncture most frequently, at vary value and durations. Treatment with CAM was mainly targeted to behavioral and emotional symptoms and not core symptoms of ASD. These findings point to deficiencies of evidence-based communication and mutual discussion between clinicians and families of CAM.

Parents' decisions to use CAM were mainly influenced by emotional urgency, social factors and practical impediments associated with conventional treatment. Use of CAM was perceived as an adaptive strategy (vs refusal to consider evidence-based care). These findings indicate that access to affordable, accessible and timely SLT services needs improving as well as a requirement for open, supportive dialogue between healthcare practitioners and parents.

Parents exhibited engaging levels of scientific knowledge regarding CAM, but they reported its use on account of hope, safety and cultural or religious belief. The use of

CAM was a manifestation of “informed uncertainty” in which emotional comfort outweighed the knowledge of risks. These results demonstrate a failure of mainstream health services and the urgent need for evidence-based, culturally sensitive and balanced professional support.

Parents most commonly reported they felt that CAM was beneficial based on behavioral improvements in the short term but there was a lack of long-term gains in speech and communication, illustrating the need for early professional intervention and an improved service delivery system for timely access to effective interventions for children with ASD.

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ANNEXURES

Annexure-1 (a)

সম্মতিপত্র

আসসালামু আলাইকুম/নমস্কার,

আমি মিস কানিজ ফাতেমা, ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা অনুষদের অধীনে বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউটে বি.এস.সি ইন স্পীচ এন্ড ল্যাংগুয়েজ থেরাপি বিভাগের ৪র্থ বর্ষের ছাত্রী হিসেবে (২০২০-২০২১) সেশনে অধ্যয়নরত আছি। আমার বি.এস.সি ডিগ্রী সম্পূর্ণ করতে আমাকে একটি গবেষণা পরিচালনা করতে হবে এবং এটি আমার অধ্যয়নের একটি অংশ। আমার গবেষণার শিরোনাম হল: **"অটিজম স্পেকট্রাম ডিজঅর্ডারে আক্রান্ত শিশুদের জন্য বিকল্প চিকিৎসা বিষয়ে তথ্য অনুসন্ধান ও সিদ্ধান্ত গ্রহণ সম্পর্কিত অভিভাবকদের অভিজ্ঞতা: ঢাকা শহর ভিত্তিক একটি গবেষণা"।**

আপনি একজন অটিজম স্পেকট্রাম ডিসঅর্ডারে আক্রান্ত শিশুর অভিভাবক হওয়ায় এই গবেষণায় অংশ নিতে আপনাকে আমন্ত্রণ জানানো হচ্ছে। আমি আপনার অভিজ্ঞতা সম্পর্কে কিছু প্রশ্ন করব এই সাক্ষাৎকারে প্রায় ১৫- ২০ মিনিট সময় লাগবে।

আমি আপনাকে জানাতে চাই যে এটি একটি সম্পূর্ণ একাডেমিক গবেষণা এবং এটি অন্য কোন উদ্দেশ্যে ব্যবহার করা হবে না গবেষক সরাসরি পক্ষাঘাতগ্রস্থদের পুনর্বাসন কেন্দ্র (সিআরপি) এর সাথে সম্পর্কিত নন, সুতরাং এই গবেষণায় আপনার অংশগ্রহণ আপনার বর্তমান বা ভবিষ্যতে চিকিৎসার ওপর কোন প্রভাব ফেলবে না। আপনার প্রদান করা সমস্ত তথ্য গোপনীয় রাখা হবে এবং কোন প্রতিবেদন বা প্রকাশনার ক্ষেত্রে নিশ্চিত করা হবে যে তথ্যের উৎসব গোপন থাকবে ।এই গবেষণায় আপনার অংশগ্রহণ স্বেচ্ছামূলক এবং আপনি যেকোনো সময় এই গবেষণা থেকে কোন নেতিবাচক পরিণতি ছাড়াই নিজেকে প্রত্যাহার করতে পারেন । এছাড়া আপনি সাক্ষাৎকার চলাকালীন যেকোনো প্রশ্নের উত্তর দিতে না চাইলে সেটি না জানানোর অধিকার রাখেন।

যদি আপনার এই গবেষণা বা একজন অংশগ্রহণকারী হিসেবে আপনার কোন প্রশ্ন থাকে আপনি গবেষক মিস কানিজ ফাতেমা অথবা সুপারভাইজার মোঃ সাজ্জাদ হোসেন, সহকারী অধ্যাপক ও বিভাগীয় প্রধান, স্পীচ অ্যান্ড ল্যাঙ্গুয়েজ থেরাপি বিভাগ, বাংলাদেশ হেলথ প্রফেশন্স ইন্সটিটিউট (বিএইচপিআই) এর সাথে যোগাযোগ করতে পারেন।

আপনার কোন প্রশ্ন আছে কি শুরু করার আগে? .....

তাহলে আমি কি ইন্টারভিউ এগিয়ে নেওয়ার জন্য আপনার সম্মতি পেতে পারি? হ্যাঁ / না

অংশগ্রহণকারীর স্বাক্ষর: তারিখ:

গবেষকের স্বাক্ষর: তারিখ:

Annexure- 1 (b)

Informed Consent form

Assalamu Alaikum / Namaskar,

I am Mst. Kaniz Fatema, currently studying as a 4th-year student in the Bachelor of Science (B.Sc.) in Speech and Language Therapy Department (Session 2020–2021) at Bangladesh Health Professions Institute (BHPI), affiliated with the Faculty of Medicine, University of Dhaka. To fulfill the requirement of a B.Sc. in Speech and Language Therapy I have to do a research project. My research title is: **"Parents' Experiences of Information-Seeking and Decision-Making Regarding Complementary Medicine for Children with Autism Spectrum Disorder: A Study in Dhaka City."**

As you are a parent of a child with Autism Spectrum Disorder, you are invited to take part in this research. I will ask you some questions regarding your experiences. This interview will take approximately 15–20 minutes.

Please note that this is purely an academic research study and will not be used for any other purpose. The researcher is not directly associated with the Centre for the Rehabilitation of the Paralysed (CRP); therefore, your participation in this research will not affect your current or future treatment in any way. All the information you provide will be kept confidential, and in any report or publication, your identity will not be disclosed.

Your participation in this research is entirely voluntary, and you may withdraw from the study at any time without any negative consequences. You also have the right to refuse to answer any question during the interview if you feel uncomfortable.

If you have any questions about this research or about your role as a participant, you can contact the researcher Ms. Kaniz Fatema or the supervisor Md. Sazzad Hossain, Assistant Professor and
Head of the Department of Speech and Language Therapy, Bangladesh Health Professions Institute (BHPI).

Do you have any questions before we start?.....

So, may I have your consent to proceed with the interview? Yes / No

Participant's Signature: Date:

Researcher's Signature: Date:

Annexure- 2 (a)

Demographic Information

(English)

Date:

Section A: Parents Information

1. Name (optional):
2. Age:
3. Gender: ☐ Male ☐ Female
4. Educational Qualification:
5. Occupation:
6. Address:
7. Phone number:

Section B: Child's Information

1. Age of The Child:
2. Gender of the child:
3. Age of ASD Diagnosis:
4. Has your child ever received any type of CAM for ASD management: ☐ Yes ☐ No
5. If yes, please indicate which type of which type of CAM your child has received:

☐Homeopathy

☐Ayurvedic medicine

☐Unani Medicine

☐ Spiritual or religious healing (e.g., prayer, amulets, blessed water)

☐ Other (please specify): _____

6. Is your child currently receiving Speech & Language therapy: ☐ Yes ☐ No

Questionnaire (English)

1. What types of complementary or alternative treatments (such as homeopathy, Unani, Ayurvedic, religious treatments, etc.) have you used for your child with autism, and for how long?
2. After using these treatments, what kinds of changes or effects have you noticed?
3. From where or from whom did you first learn about these types of alternative treatments?
4. Among all the information you have received, which type of information did you find the most helpful?
5. What was the most important reason or factor behind your decision to use complementary or alternative treatments for your child?
6. When you received conflicting information about these treatments, how did you make your decision?
7. What is your opinion about the quality of the information you have received regarding these treatments—for example, did you consider it reliable, evidence-based?
8. Have you taken speech and language therapy for your child? (If yes, Why did you take it?/If no, Why did you not take it?)
9. Are you interested in taking speech and language therapy for your child in the future? (If yes, Why are you interested?/If no, Why are you not interested?)
10. Do you have anything else to say?

Annexure- 2 (b)

Demographic Information

(Bangla**)**

তারিখ:

বিভাগ ক: পিতা-মাতার তথ্য

১। নাম (ঐচ্ছিক): ২। বয়স:

৩। লিঙ্গ: ☐ পুরুষ ☐ মহিলা

৪। শিক্ষাগত যোগ্যতা: ৫। পেশা:

৬। ঠিকানা: ৭। মোবাইল নাম্বার:

বিভাগ খ : বাচ্চার তথ্য

১। বাচ্চার বয়স: ২। বাচ্চার লিঙ্গ:

৩। বাচ্চার অটিজম নির্ণয়ের বয়স:

৪। ASD ব্যবস্থাপনার জন্য আপনার বাচ্চা কি কোন প্রকার বিকল্প চিকিৎসা (CAM-Complementary and Alternative Medicine) গ্রহণ করেছে? ☐ হ্যাঁ ☐ না

৫। যদি হ্যাঁ হয়, দয়া করে বিকল্প চিকিৎসার কোন ধরনের চিকিৎসা আপনার বাচ্চা নিয়েছে তা উল্লেখ করুন:

☐ হোমিওপ্যাথি

☐ আয়ুর্বেদিক চিকিৎসা

☐ ইউনানি চিকিৎসা

☐ আধ্যাত্মিক বা ধর্মীয় চিকিৎসা (যেমন প্রার্থনা, তাবিজ, পবিত্র জল ইত্যাদি)

☐ অন্যান্য (অনুগ্রহ করে উল্লেখ করুন): _____

৬। বর্তমানে কি আপনার বাচ্চা স্পীচ অ্যান্ড ল্যাঙ্গুয়েজ থেরাপি নিচ্ছে? ☐ হ্যাঁ ☐ না

প্রশ্নাবলী

১। আপনি আপনার অটিজমে আক্রান্ত বাচ্চার জন্য প্রচলিত চিকিৎসার বাইরে কি কি বিকল্প চিকিৎসা (যেমন: হোমিওপ্যাথি, ইউনানী, আয়ুর্বেদিক, ধর্মীয় চিকিৎসা) ব্যবহার করেছেন এবং কতদিন ব্যবহার করেছেন?

২। এই চিকিৎসাগুলো নেওয়ার পর আপনি কী ধরনের পরিবর্তন বা প্রভাব লক্ষ্য করেছেন?

৩। আপনি প্রথমে কোথা থেকে বা কার মাধ্যমে এই ধরনের বিকল্প চিকিৎসা সম্পর্কে জেনেছেন?

৪। আপনি যে সব তথ্য পেয়েছেন, তার মধ্যে কোন ধরনের তথ্য সবচেয়ে বেশি উপকারী মনে হয়েছে?

৫। আপনার সন্তানের জন্য বিকল্প চিকিৎসা ব্যবহার করার সিদ্ধান্তে সবচেয়ে গুরুত্বপূর্ণ কারণ কী ছিল?

৬। এই চিকিৎসা নিয়ে আপনি সাংঘর্ষিক পূর্ণ তথ্য পাওয়ার পর কিভাবে সিদ্ধান্ত নিয়েছেন?

৭। এই চিকিৎসা সম্পর্কে আপনি যে তথ্যগুলো পেয়েছেন, সেগুলোর মান সম্পর্কে আপনার ধারণা কি অর্থাৎ এটি কি নির্ভরযোগ্য বা বিজ্ঞানভিত্তিক মনে করেছেন?

৮। আপনি কি আপনার বাচ্চার জন্য স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি নিয়েছেন? (যদি হ্যাঁ হয়, তাহলে কেন নিয়েছেন/ যদি না হয়, তাহলে কেন নেননি?)

৯। আপনি কি আপনার বাচ্চার জন্য ভবিষ্যতে স্পীচ এন্ড ল্যাঙ্গুয়েজ থেরাপি নিতে আগ্রহী? (যদি হ্যাঁ হয়, তাহলে কেন নিতে আগ্রহী/ যদি না হয়, তাহলে কেন নিতে আগ্রহী না?)

১০। আপনার আর কোনো কিছু বলার আছে কি না?

Annexure- 3 (a)

Approval Letter From IRB

BANGLADESH HEALTH PROFESSIONS INSTITUTE

বাংলাদেশ হেলথ্ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)

Bangladesh Health Professions Institute (BHPI)

(The Academic Institute of CRP)

Ref: CRP-BHPI/IRB/ 09/2025/1164

Date: 15.09.2025

To
Mst. Kaniz Fatema
4th Year B.Sc. in Speech & Language Therapy
Session: 2020-21, DU Reg. No.: 14314, Student ID: 132000293
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal "Parent's experience of information-seeking and decision making regarding Complementary medicine for children with autism spectrum disorder in Dhaka city"- by the ethics committee.

Dear Mst. Kaniz Fatema,
Congratulations,
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned thesis, with yourself, as the principal investigator and Md. Sazzad Hoosain, Assistant Professor and Head of the Speech and Language Therapy Department, BHPI as thesis Supervisor. The Following documents have been reviewed and approved:

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

The purpose of the study is to explore parent's experience of information-seeking and decision making regarding Complementary medicine for children with autism spectrum disorder in Dhaka city. The study involves answering a semi-structured questionnaire to explore that may take about 15 to 20 minutes. There is no likelihood of any harm to the participant. Data collectors will receive informed consents from all participants. Any data collected will be kept confidential. The members of the Ethics committee has approved the study to be conducted in the presented form at the meeting held at 08:30 AM on May 21, 2025 (49th IRB meeting) 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
Associate Professor, Project and Course Coordinator, MRS
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
CRP-Chapain, Savar, Dhaka-1343, Bangladesh. Tel: +88 02 224445464-5, +88 02 224441404, Mobile: +88 01730059647
E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

Annexure- 3 (b)

Permission Letter for Research Conduction

29 July 2025

To

The Head

Department of Speech & Language Therapy

Bangladesh Health Professions Institute (BHPI)

CRP, Savar, Dhaka-1343, Bangladesh

Subject: **Prayer for Seeking Permission to conduct the Research Project.**

Sir,

With due respect, I state that I am a 4th year student of B.Sc. in Speech & Language Therapy Department, Session: 2020-21 at Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). I am sincerely seeking your permission to conduct my research project as the partial fulfillment of the requirement for the degree of B.Sc in Speech and Language Therapy. The title of research project is **"Parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City."**. The main objective is to explore parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City.

Now I am seeking your kindness to approve me to conduct the research project and I would like to ensure that anything of my research project will not be harmful to the participants.

So, I therefore pray and hope that you would be kind enough to grant me the permission to conduct the research project.

Your obediently

Kaniz Fatema

Mst. Kaniz Fatema
4th year student of B.Sc. in Speech & Language Therapy Department
Bangladesh Health Professions Institute (BHPI)
CRP, Savar, Dhaka-1343

Head of the Department	Comment
Md. Sazzad Hossain Assistant Professor & Head Department of Speech and Language Therapy Bangladesh Health Professions Institute (BHPI) CRP, Savar, Dhaka	Permission has been granted. 29.7.25

Md. Sazzad Hossain
Asst. Professor & Head
Department of Speech and Language Therapy
Bangladesh Health Professions Institute (BHPI)
CRP, Savar, Dhaka

Annexure- 3 (c)

Permission Letter for Data Collection

29 July,2025
To,
The Head
Department of Speech & Language Therapy
Bangladesh Health Professions Institute (BHPI)
CRP, Savar, Dhaka-1343, Bangladesh.

Subject: Prayer for Seeking Permission to data collection as part of Research Project conduction.

Sir,

With due respect and humble submission, I would like to inform you that I am a 4th year student of B.Sc. in Speech & Language Therapy Department, Session: 2020-21 at Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). At this state I am intending to do dissertation as partial fulfillment of the requirement for the degree of B.Sc. in Speech and Language Therapy. The title of research project **"Parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City."**. The main objective is to explore parent's experience of information-seeking and decision making regarding complementary medicine for children with autism spectrum disorder in Dhaka City.

Now, I am seeking your kindness to approve me to collect data as part of the research project conduction, and I would like to ensure that anything of my research project will not be harmful to the participants.

So, I therefore pray and hope that you would be kind enough to grant me permission to collect data for conducting the research project.

Yours obediently,

Kaniz Fatema
Mst. Kaniz Fatema
4th year student of B.Sc. in Speech & Language Therapy Department
Bangladesh Health Professions Institute (BHPI)
CRP, Savar, Dhaka-1343, Bangladesh.

Head of the Department	Comment & Signature
Md. Sazzad Hossain Assistant Professor & Head Department of Speech and Language Therapy Bangladesh Health Professions Institute (BHPI) CRP, Savar, Dhaka-1343, Bangladesh.	Permission has been granted. 29.7.25

Md. Sazzad Hossain
Asst. Professor & Head
Department of Speech and Language Therapy
Bangladesh Health Professions Institute (BHPI), CRP

Annexure- 3(d)

বাংলাদেশ হেল্‌থ প্রফেশন্স ইনষ্টিটিউট (বিএইচপিআই)

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka. Tel: 02224445464 , 02224441404, Website: www.bhpi.edu.bd

Date: 06.08.2025

To

Principal,

Government Homeopathic Medical College & Hospital,

Mirpur-14, Dhaka-1206.

Subject: *Regarding Data collection for dissertation.*

Greetings from Bangladesh Health Professions Institute (BHPI). I would like to inform you that BHPI the Academic Institute of CRP is running B. Sc in Speech and Language Therapy Course under Faculty of Medicine, University of Dhaka.

According to the content of 4th year of University course curriculum, the students have to do Research and Course work in different topics to develop their skills. Considering the situation your institute will be the most appropriate place to collect data.

year students of BHPI, Mst. Kaniz Fatema would like to collect data in your organization from 07.08.2025 to 30.10.2025. Her title: "Parent's Experience of information Seeking and decision making regarding Complementary medicine for Children with autism spectrum disorder in Dhaka city."

We shall remain grateful to you if you could kindly allow her to collect data in your Organization.

With regards

Md. Sazzad Hossain
Asst. Prof. & Head
Dept. of Speech & Language Therapy
CRP, Savar, Dhaka.

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI) Date:..... CRP, SAVAR, DHAKA

Annexure- 3(e)

বাংলাদেশ হেল্‌থ প্রফেশন্স ইনষ্টিটিউট (বিএইচপিআই)

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)

(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 02224445464 , 02224441404, Website: www.bhpi.edu.bd

Approved

Date: 06.08.2025

Sir,
Pls. consider
the matter.
25/9/25

To

Principal,
Government Unani and Ayurvedic Medical College & Hospital,
Mirpur-13, Dhaka-1206.

সরকারী ইউনানী ও আয়ুর্বেদিক মেডিকেল কলেজ ও হাসপাতাল কলেজ
তারিখ নং- ৫৮৭ তাং 22/9/25
কোর্স চেয়ারম্যান, বিইউএমএস/বিএএমএস
বিভাগীয় প্রধান ইউ/আয়ু/মওনা :
সচিব
হিসাব রক্ষক
উচ্চমান সহকারী/কার্যালয়/লাইব্রেরীয়ান
স্টোর কিপার
অধ্যক্ষ-কাম-অধীক্ষক

Subject: *Regarding Data collection for dissertation.*

Greetings from Bangladesh Health Professions Institute (BHPI). I would like to inform you that BHPI the Academic Institute of CRP is running B. Sc in Speech and Language Therapy Course under Faculty of Medicine, University of Dhaka.

According to the content of 4th year of University course curriculum, the students have to do Research and Course work in different topics to develop their skills. Considering the situation your institute will be the most appropriate place to collect data.

4th year students of BHPI, Mst. Kaniz Fatema would like to collect data in your organization from 07.08.2025 to 30.10.2025. Her title: "Parent's Experience of information Seeking and decision making regarding Complementary medicine for Children with autism spectrum disorder in Dhaka city."

We shall remain grateful to you if you could kindly allow her to collect data in your Organization.

With regards

BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI) Date:..... CRP, SAVAR, DHAKA

Md. Sazzad Hossain
Asst. Prof. & Head
Dept. of Speech & Language Therapy
CRP, Savar, Dhaka.