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Research Article

Navigating Sexual Issues in Adolescents with Autism Spectrum Disorder: Mothers' Lived Experiences Through Qualitative Inquiry

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Background

Individuals with autism typically show normal physical development through adolescence; however, their social and emotional development is often significantly delayed compared to their peers. This disparity can create challenges related to both sexual maturation and the navigation of social transitions.

Objective

This study aims to explore the sexual behaviors and related issues experienced by adolescents with autism spectrum disorder (ASD) as described by their mothers. It also examines the strategies these mothers use to address such behaviors and identifies the challenges they encounter in managing them.

Methods

A qualitative descriptive approach was employed for data collection and analysis, using semi-structured, in-depth interviews with mothers of adolescents diagnosed with ASD. Five mothers were selected through purposive sampling to ensure relevance to the research questions. Data were analyzed using thematic analysis.

Results

Three main themes emerged, corresponding to the study's central area of focus. The first theme, challenging sexual behaviors, included subthemes such as masturbation, nudity, frequent genital touching, spending extended time in the bathroom, use of sexual language, and gender inequality. The second theme, parental strategies for addressing sexual behaviors, involved verbal educational methods (e.g., dialogue and discussion), visual teaching aids, warnings, isolation, and, in some cases, punishment. The third theme, challenges faced by mothers, revealed subthemes including characteristics of the disability, lack of institutional support, and social barriers, which emerged as common challenges reported across participants.

Conclusion

This study highlights the unique experiences of mothers navigating the sensitive issue of sexual development in their adolescent children with ASD within a conservative cultural context. Despite prevailing cultural norms, these mothers demonstrated resilience and took proactive steps to support their children's sexual development.

1. INTRODUCTION

Autism spectrum disorder (ASD) is a complex neurodevelopmental disorder characterized by impairments in social interaction, communication, and restricted, stereotyped behaviors.[1] In addition to the core symptoms of ASD, individuals often experience comorbid psychological disorders that impact their behavior and social interactions, including anxiety, depression, sleep disturbances, repetitive behaviors, hyperactivity, and attention difficulties.[1] These comorbidities can directly impact sexual expression in adolescents with autism, as difficulties with

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social communication and cognitive skills may lead to disorganized or challenging sexual behaviors.[2] Literature suggests that individuals with autism show typical physical development up to adolescence; however, their social and emotional development is usually quite delayed compared to their peers, causing problems with many of the most common aspects of social change related to sexual maturation.[3-5] It is a common myth that individuals with autism have no sexual desire or needs. Studies have demonstrated that individuals with autism experience romantic feelings and sexual behaviors, some of which might be potentially inappropriate or maladaptive due to developmental age, lack of awareness, or inadequate family and institutional support.[6,7] A study by Heifetz *et al*.[7] showed that 85% of individuals with ASD desire a romantic relationship, but fewer than 50% are successful in establishing one. Even when they do enter a relationship, many struggle to understand their partner's feelings and needs, which negatively impacts the quality of the relationship.

Adulthood is one of the most important and complex stages in life, as it consists of the formation of personality and its basic psychological and social characteristics.[8] Experts make a distinction between puberty and adolescence.[9] Puberty is the period during which physical changes occur, such as the development of the genitals and the appearance of hair in sensitive areas. It typically begins at the age of 11–12 in boys and 12–13 in girls.[4] Adolescence is the long transition from age 10 to age 19, incorporating the physical, psychological, and social transitions of puberty.[9] For individuals emerging into adulthood, especially those with ASD, there are double challenges during this period, mainly due to intellectual rigidity, communication issues, and difficulties in social understanding. Therefore, undesirable or challenging sexual behaviors are common among those with ASD, particularly if they lack sex education.[5,10]

In several studies, researchers have found that inappropriate sexual behavior in adolescents with autism (such as public masturbation, undressing, or genital touching) reflects a lack of guidance or awareness rather than deviant behavioral intent.[11-14] Fernandes *et al*.[12] showed that nearly a third of children with ASD or pervasive developmental disorder-not otherwise specified, who have an intelligence quotient of 70 or less, exhibited challenging sexual behaviors such as public masturbation, nudity, or inappropriate sexual behaviors, according to parents' reports, with most displaying only one such behavior. In a comprehensive systematic review, Beddows and Brooks[11] examined challenging sexual behaviors among adolescents with ASD, aiming to identify the causes of these behaviors, provide appropriate educational recommendations, and identify research gaps in this area. The study reviewed 42 research sources that addressed behaviors such as excessive masturbation, masturbation in public, inappropriate romantic gestures, sexual arousal in social situations, and sexual exhibitionism. The study demonstrated that these behaviors often result from a misunderstanding or lack of full understanding of the physical and emotional changes that accompany puberty, in addition to weak or absent appropriate sex education, and the severity of autism symptoms or associated difficulties, and called for the provision of early and ongoing educational programs that focus first on developing social skills, followed by direct sex education.

In another study, Schöttle *et al*.[13] showed that men with high-functioning autism were more likely to engage in excessive sexual behaviors, more frequent masturbation, and deviant sexual imaginations and behaviors (such as unusual sexual fantasies or interests), compared to control group men, whereas similar differences were not found between women in both groups. Although some of these behaviors are acceptable if they are consensual and conscious, they may become inappropriate due to autism-related difficulties in understanding sexual relationships and behaviors. The women in the healthy control group also showed a higher level of sexual desire and activity than their autistic counterparts.

In the Asian context, Sinaga *et al*.[14] conducted a qualitative, phenomenological study to examine the experiences of parents coping with the emergence of sexuality in adolescents with ASD in West Java, Indonesia. Parents of seven adolescents with ASD participated in the study, utilizing semi-structured and open-ended interviews as data collection techniques. The researchers identified 11 latent sexual behaviors as reported by parents, including genital touching, disturbing their pants, self-stimulation, stimulation to others, gender confusion, and arousal-related postures. Parents expressed feelings of confusion and unpreparedness as they dealt with these behaviors individually without training or institutional support. The study recommended the need to prepare families through appropriate education and opening channels of dialogue within the family, in line with the cultural and religious specificities of the community.

Moreover, one specific challenge in expressing sexual orientation is that these individuals' sexual desires are accompanied by a lack of social understanding, making it difficult for them to internalize social norms. This can lead to otherwise normal sexual behavior, such as masturbation, being expressed in inappropriate ways or settings.[15,16] In adulthood, individuals with ASD need to express their sexual interests and form intimate relationships like their neurotypical peers. However, a lack of social and communication skills may prevent them from expressing these needs, and it may result in a lack of access to knowledge about appropriate social behaviors to cope with the physical and sexual changes that occur during puberty.[17]

Parents—mothers in particular—often carry the major responsibility of caring for and guiding their children during this crucial time. However, they are frequently faced with significant challenges due to a lack of resources, knowledge, or societal support.[17,18] Sinaga *et al*.,[14] in Indonesia, found that parents observed 11 repetitive sexual behaviors in their adolescents with ASD, including undoing their pants, self-stimulation, or genital touching. They reported a lack of institutional and cognitive support, and their individual approach to managing these behaviors increased their suffering. The study recommended educational support for families and the establishment of dialogue within the family, taking into account cultural and religious factors.

On the other hand, Pryde and Jahoda[18] highlighted mothers' feelings regarding the sexual development of their children with autism and intellectual disabilities, indicating that fear, tension, and hesitation often accompany this experience, and that there is a pressing need to provide cognitive and professional support to enhance mothers' confidence in fulfilling this difficult educational role. Some participants also expressed concern about their children's emotional future. Studies also indicate that these adolescents suffer from a significant lack of sexual education compared to their non-disabled peers, leading to poor sexual knowledge and inappropriate behaviors, such as a lack of privacy during masturbation or undressing.[5,19] They are at increased risk of sexual exploitation, highlighting the need for comprehensive sexual and emotional education

programs that address their specific characteristics, such as cognitive rigidity, communication difficulties, and poor social interaction. Alhassan and Gharaibeh[3] conducted a pilot study in an Arab setting, comparing Jordanian mothers' understanding of sex education for their children with autism. The findings reflected some substantial improvement after the training program, particularly among mothers with university education. This study emphasized the need for family-focused programs based on cultural and religious aspects, especially in conservative contexts.

The management of stressful situations is complex and multidimensional.[21] Lazarus and Folkman[21] defined coping as the cognitive and behavioral measures used by a person to manage internal and external demands during a state of stress. According to this framework, the researchers proposed two types of coping efforts: Problem-focused coping, aimed at addressing the source of stress and taking actions to remove or alter it; and emotion-focused coping, which involves attempting to change stress-related feelings. Evidence shows that coping is a dominant factor in managing, reducing, or adapting to stress and in defining whether a stressful event is processed adaptively or maladaptively.[2,22] Based on this, studies have shown that parents of children with autism employ various coping resources such as support from friends and family, social support groups, other families with children with autism, service providers, outreach services, and religion.[23,24] Parents' ability to cope with high levels of stress also correlates with the effectiveness and range of coping strategies they employ in an effort to manage the pressures associated with raising a child with autism.[36]

Iqbal *et al*.[25] conducted an exploratory qualitative study in Pakistan to examine parental challenges in providing home-based sexual education to adolescents with ASD in the Asian context. The participants were 12 parents from Pakistan, and data were collected through semi-structured interviews. Thematic analysis was utilized to analyze the data. Parents indicated they viewed home-based sexual education as a right for their children, although they expressed discomfort in discussing the topic. Some strategies included explaining body part terminology and good/bad touch concepts, using images and video clips, and facilitating natural learning (through repetition and situational learning) within their daily lives. Organizational orientation for parents involved educating them about human development and culturally appropriate and safe sexual education at home. Lehan Mackin *et al*.[26] revealed, through interviews with 15 parents, that the greatest burden of sex education falls on the family in the absence of appropriate educational resources, and that parents prefer to use flexible and personalized technology tools to meet their children's needs. These findings are consistent with those of Panagiotakopoulou *et al*.,[27] who confirmed that concepts such as consent, privacy, and physical safety are difficult to communicate to children without the use of practical examples and multidisciplinary interventions. In Saudi Arabia, although limited research exists, Shakuri and Alzahrani[28] conducted one of the first qualitative studies to examine the difficulties of offering sexual and reproductive education to adolescents with autism from a parental perspective. The study highlighted a wide knowledge gap and an urgent need for training programs that are culturally and religiously sensitive. That said, it did not directly address the nature of sexual behaviors or what mothers do when such behaviors occur; the present study aims to address these gaps. Based on the above research gaps, the importance of the current study becomes clear. It is one of the first qualitative studies in Saudi Arabia to focus on three interconnected axes: Sexual problems and behaviors among adolescents with ASD as observed by mothers; the strategies mothers adopt to deal with these behaviors; and the challenges they face within a conservative cultural framework that is highly sensitive to sexual topics. The aim of this study is to explore the sexual behaviors and related issues experienced by adolescents with ASD as described by their mothers; to examine the strategies these mothers use to address such behaviors, and to identify the challenges they encounter in managing them. The primary questions guiding this research were:

(i) What are the sexual behaviors and issues experienced by adolescents with ASD as described by their mothers?
(ii) What strategies do mothers use to address sexual behaviors in their adolescent children with ASD?
(iii) What challenges do mothers face in dealing with the sexual behaviors of their adolescent children with ASD?

2. ETHICS

Before sending invitations to the non-probability sample, approval was obtained from the Human Research Ethics Committee at Tabuk University. Participant information sheets included clear instructions enabling participants to discontinue their participation in the research at any time and to decline to answer any questions posed to them. To ensure the confidentiality and anonymity of participants, written transcripts and notes were subjected to anonymization procedures. Participants' names were replaced with initials or numeric codes, and any sensitive data that could lead to identification was excluded from the reports.

3. THEORETICAL APPROACH

The study employed a qualitative descriptive approach for data collection and analysis, a methodology commonly used in the social sciences, psychology, and educational research.[29] The aim of this study is to explore the sexual behaviors and related issues experienced by adolescents with ASD as described by their mothers, to examine the strategies these mothers use to address such behaviors, and to identify the challenges they encounter in managing them.

3.1. PARTICIPANT RECRUITMENT

Invitations to participate were sent to members of the Tabuk Autism Society via email and WhatsApp by the Deanship of Graduate Studies and Scientific Research after obtaining approval from the Research Ethics Committee. The goal was to ensure voluntary participation without coercion. The invitation letter included the research title, purpose, research questions, information about confidentiality, participant rights, data handling, and methods of communication with the author. It also included a sample of interview questions, the estimated time required for the interview, and the inclusion criteria. After the invitation letter was sent to the parents, the participants notified the author by phone that they were interested in participating in the study.

3.2. PARTICIPANTS

A non-probability sample[31,32] was selected from the Tabuk Autism Society, which serves both families and individuals

with ASD. Participants were mothers who were the primary caregivers of children and met the following inclusion criteria: A son or daughter diagnosed with ASD; the adolescent lived with their mother from birth to adolescence; and the adolescent was between the ages of 10 and 18. Invitations were sent to all mothers without exception, but only seven expressed interest in participating. After careful review of the initial data, one was excluded because her child was younger than the inclusion age, and one was excluded because the adolescent did not live with her, as she was divorced. Five participants met the criteria; their children ranged in age from 10 to 16. According to Creswell,[31] qualitative research studies should have between 5 and 25 participants. While a relatively small sample size is a hallmark of interpretative phenomenological analysis research, the focus is on the in-depth examination of a small, homogeneous sample. [30,33,34] Thematic saturation was reached after the fourth interview, as no new codes or themes emerged. To confirm this, a fifth interview was conducted, which verified that saturation had been achieved and that engaging additional participants was unlikely to produce new data. Table 1 presents brief information about the mothers and their children with autism (pseudonyms have been used to protect their identities).

3.3. PROCEDURE

Semi-formal interviews with mothers of adolescents with ASD were conducted over the telephone, which was more appropriate due to Islamic customs and traditions, and allowed for greater freedom of discussion. Studies have shown no significant differences between face-to-face and remote interviews.[32] Interview dates were arranged based on participants' preferences. Written informed consent was sent to all participants in advance of each interview. Before each interview, the key points of the informed consent were confirmed, and the participant was asked to sign it. During each interview, the discussion began with general questions and was followed by open-ended questions to elicit in-depth information, such as "Do you feel your son has changed recently?" and "Can you tell me about any physical changes you have noticed in your son during adolescence?" Participants were reminded that they had the right to take a break during the interview, though none requested one. After each interview was completed, the recordings were transcribed into Word documents without any additions, deletions, or modifications. A copy of each transcript was then sent to the participants after any identifying personal information had been removed. None of the participants made any changes or additions, except for one, who requested the removal of a paragraph, which was done. The analysis team was then asked to read the interviews carefully and thoroughly, extract the codes, group them, and then identify themes for each interview.

3.4. RESEARCHER REFLEXIVITY

As a researcher and educator, the author was conscious of the influence of their experiences, beliefs, and professional background on the processes of data collection and analysis. The author engaged in reflexivity throughout the study to mitigate bias and to allow the participants—mothers of adolescents with ASD—to speak for themselves. Professionally, the author has worked with individuals diagnosed with ASD and their families in educational and behavioral support programs. This context informed their understanding, but the author was also careful not to let it shape the assumed meanings of the participants' narratives. Following each interview, the author maintained a reflective journal in which they documented their thoughts, feelings, and interpretations.

During thematic analysis, the author revisited these reflections to ensure their perspective did not influence the coding process. For instance, the author identified their own tendency to empathize deeply with the emotional pain of the parents, which could have influenced the themes they focused on. To mitigate this, the author consulted with other qualitative research experts to maintain rigor and transparency in the analysis. This reflexive process helped the author remain mindful of the data and prepared the author to respect each parent's experience as legitimate, even if it differed from or challenged the author's expectations. Ultimately, this contributed to the authenticity of the research by fostering self-awareness in both the author and the research process.

As a specialist in special education, the author works closely with children and families affected by ASD. This helped build trust between the author and the mothers participating in the study and allowed the author to relate to their experiences on an experiential level. Given the conservative Saudi context, the author was aware of the sensitivity surrounding the research topic, particularly regarding

Table 1. Participant characteristics

Participant (mother)	Marital status	Education	Employment	No. of children	Child with ASD (name/age/sex)	Verbal ability and characteristics	Schooling
Laila	Married	Primary	Unemployed	5	Talal/16/male	Non-verbal; understands speech and commands; learns via pictures	Integration program
Jumana	Divorced	University	Unemployed	2	Ahmed/16/male	Non-verbal; uses some words; expresses via gestures and movements	Integration program
Raghad	Divorced	University	Employed	2	Ayat/14/female	Verbal and social; understands and follows commands	Integration program
Kinda	Married	University	Unemployed	1	Khaled/11/male	Communicates with family; flexible	Integration program
Manal	Married	University	Employed	1	Abdullah/15/male	Non-verbal; understands and follows commands	Integration program

Abbreviation: ASD: Autism spectrum disorder.

sex education. This awareness guided them to frame questions in a religiously and culturally acceptable manner. The author was mindful that this context might influence their interpretation of the data, so they took steps to minimize bias by regularly discussing their findings with members of the analysis team and consistently referring back to the original interview transcripts. The author also maintained transparency throughout the research to more accurately and objectively represent participants' voices.

3.5. DATA ANALYSIS

The author transcribed all five interviews verbatim and saved them as Word documents. The transcripts were then reviewed to ensure accuracy and conformity with the original audio recordings. After each interview, a transcript was sent to the respective participant for verification. Once confirmed, any personal information that could identify the interviewees was removed. None of the participants made changes or additions, except for one who requested a paragraph be deleted, which was done. The analysis team then carefully read the transcripts to extract codes, cluster them, and develop themes for each interview. All transcripts were uploaded to Dedoose, an online qualitative data analysis software (SocioCultural Research Consultants, LLC, USA). The author, "Coder 1," and assistant researcher, "Coder 2," used the same narrative process to identify salient excerpts from the Arabic transcripts, beginning with initial coding by reading each word and sentence of all participants' responses three separate times. If consensus could not be reached, a third coder was consulted to provide feedback until agreement was achieved. During this process, the coding system was modified as needed. Themes were developed after coders compiled shared excerpts and established agreed-upon codes that appeared at least three times across participants. However, code counting was used solely to confirm theme identification.[33,34] To calculate inter-rater reliability (percentage), Creswell Miles and Huberman's[29] 10 method was used, dividing the total number of agreements by the sum of agreements and disagreements. The average inter-rater reliability was 86%. Disagreements were resolved through discussion among coders to ensure consistency and accuracy in the analysis.

4. RESULTS

Following thematic analysis of the data from the semi-structured interviews, three main themes were identified, reflecting the three main axes targeted by the study: Challenging sexual behaviors, parental strategies for addressing sexual problems, and challenges faced by parents.

4.1. CHALLENGING SEXUAL BEHAVIORS

"I was seeing strange behaviors… and I didn't know it was due to this stage [adolescence]."

The theme of challenging sexual behaviors encompasses all sexual behaviors considered problematic during adolescence among individuals with ASD. In discussing this theme, the mothers described several behaviors exhibited by their adolescent children. They agreed that the most common sexual behaviors included masturbation, nudity, frequent touching of the genitals, spending extended time in the bathroom, the use of sexual language, and behaviors related to gender inequality. According to the mothers, these inappropriate behaviors were often unexpected and surprising. For example, Laila stated: "Talal would leave the bathroom without his clothes on, not realizing that his genitals had grown … and all he was afraid of was that other children would see them … because he had never experienced that before!" All the mothers also indicated that masturbation is the most common sexual behavior among their adolescent children. Manal, for example, reported that her son masturbates in various places and at many times: "My son rubs his penis with his hand through his clothes at different times, but most often before bedtime." Jumana also confirmed that her son was rubbing his penis in several places, such as the living room. Meanwhile, Raghad expressed her surprise at her daughter's frequent touching of her genitals: "My daughter has started touching her genitals constantly … I thought she was in pain, but I recently realized she was just arousing herself." Most participants agreed on that point, to which Jumana added that her son has begun repeating sexual language that he heard at school or from his cousins. Raghad confirmed this statement when she said that her son was repeating the term "intercourse" because his father was repeating this word in front of him.

4.2. PARENTAL STRATEGIES FOR DEALING WITH SEXUAL PROBLEMS

"Each of us has started to act according to her own feelings."

The theme of parental strategies for addressing adolescents' sexual behaviors includes the methods parents employ to manage unwanted sexual behaviors in their children with ASD. These strategies include verbal educational methods (e.g., dialogue and discussion), the use of images, warnings, isolation, and, in some cases, punishment. Such strategies reflect the mothers' awareness of ways to respond to their children's problematic sexual behaviors. Notably, all the mothers reported using pictures to teach their children about appropriate or inappropriate contexts for sexual behaviors. For example, Kinda stated:

> When I saw my son [Khaled] one day… he was coming out of the room with his penis erect and his father was sitting in the living room… his father was shocked by the situation … he [the father] told me to teach him [Khaled] that it's wrong, so I searched the Internet for ways to deal with such behaviors and found some pictures that showed it was inappropriate behavior… so I printed them out and then sat with my son and explained the mistake to him. He seemed to understand, although I had to go over the pictures multiple times.

Raghad added that her daughter used to touch her genitals in front of others, which prompted her to warn her daughter as soon as she saw the behavior, and the other mothers agreed with Raghad on that point. Kinda explained that her son often asked questions about his private parts in public places, which prompted her to gently guide him and provide age-appropriate explanations. Laila also admitted to isolating her son when there are strange girls in the house. She stated, somewhat hesitantly, "When our neighbor's daughters visit us, he goes out and tries to sit with them. You know that here, boys don't see girls once they grow up, so I isolate him in the room for men only. After the guests leave, I sit with him and explain to him that he's a grown-up." The participants also reported using role-play to teach their sons appropriate, desirable behaviors. For example, Jumana stated:

> Once, my son wanted to masturbate, and he didn't know when or where he might do it … I sat with him and did a simple role-play using a doll and showed him that there are special places for it, but not in front of people. I tried to explain to him that masturbating is a private matter, with a time and place, but he didn't understand at first. But after repeated attempts, he began to understand a little.

Manal, by contrast, referred to directly punishing her son: "I don't explain much, and I don't like explaining. If I see inappropriate sexual behavior, I punish him immediately." Kinda said, "I hit my son [lightly] when he says a sexual word. so that he learns." Laila and Raghad agreed with Manal and Kinda by stating that they resort to punishment as a first response due to fear or embarrassment, especially if the behavior occurs in front of others.

4.3. CHALLENGES FACING PARENTS

"The situation is difficult… and we try to learn everything on our own."

Regarding the challenges faced by parents, all mothers reported encountering significant obstacles in managing the problematic sexual behaviors exhibited by their adolescent children—obstacles that also hinder the effective implementation of parenting strategies. Subthemes such as the characteristics of the disability, lack of institutional support, and social barriers emerged as the most prominent common denominators when mothers described these challenges. More specifically, these included the nature of the disability, non-verbal communication, lack of awareness, lack of training, and feelings of shame. The mothers' discussions frequently centered on challenges presented by the disability itself, with most indicating that one of the greatest obstacles to effectively interacting with their children was the disability. Manal noted that she struggles significantly to communicate with her son because there is no direct response indicating understanding—an issue all other participants echoed. Laila also voiced criticism of the school, particularly regarding its lack of appropriate preparation for adolescents with ASD, including education and awareness: "The school didn't talk to us about the changes that families may face during adolescence, or even prepare the adolescents themselves, which forced us to go to associations to look for training courses." Jumana and Raghad agreed with her, while Kinda emphasized that schools do not provide training programs for parents on how to support adolescents with ASD. She stated: "There is not a single course that helps us understand how to guide our children at this stage [adolescence]… We do everything ourselves." Raghad, by contrast, expressed her discomfort in discussing the topic, both with strangers and with her own son. She also explained that societal pressure exacerbates their difficulties: "Society doesn't understand what we're going through. On the contrary, it criticizes us instead of offering support, and this makes it even more difficult."

5. DISCUSSION

The findings of this qualitative study provide a comprehensive viewpoint on Saudi Arabian mothers' experiences coping with the sexual behaviors of their adolescent children with ASD. Three interrelated themes emerged from the data: challenging sexual behaviors, parental strategies for addressing sexual problems, and challenges faced by parents. These themes collectively reflect the conflict between the need to address such behaviors from an educational standpoint and the social and cultural limitations imposed by the Saudi context.

Mothers described a variety of sexual behaviors that often began in early puberty, including frequent masturbation, cross-dressing, genital touching, and other sexualized behaviors directed toward others. These behaviors are consistent with those documented in the study done by Sinaga *et al.*,[14] conducted in an Indonesian context, where parents reported 11 similar repetitive behaviors that relate to sexual development. Such behaviors frequently occur in the absence of a broader understanding of the physical and emotional changes that accompany adolescence and without adequate guidance for the learners. This aligns with Beddows and Brooks,[11] who suggested that a lack of sexual education is a major contributor to the recurrence of these sexual behaviors. These findings can also be interpreted through the lens of Lazarus and Folkman's[22] coping model. Mothers encountering such behaviors in a socially and culturally restrictive environment experience significant stress. With limited access to formal resources, problem-focused coping strategies become less effective, leading many to rely on emotion-focused coping mechanisms to manage the anxiety and stress associated with these daily challenges.

The study also revealed that most mothers addressed these behaviors in individual and often spontaneous ways, ranging from ignoring them to using threats or isolation. These responses were commonly driven by confusion, embarrassment, or fear of social judgment. This is consistent with the findings of Iqbal *et al.*,[25] who noted that while parents recognized home-based sexual education as a fundamental right for their children with ASD, they often expressed discomfort in initiating such discussions. Reported strategies included teaching anatomical terminology, introducing the concepts of appropriate and inappropriate touch, using visual aids such as images and videos, and embedding learning in everyday contexts through repetition and situational teaching.

Some mothers indicated using the Internet as a source of information in the absence of formal training programs or institutional intervention. This finding aligns with the study by Lehan Mackin *et al.*,[27] in which participants reported a lack of concrete educational resources and the use of open-ended or unguided tools. Panagiotakopoulou *et al.*[27] also corroborated this, noting that poor educational resources and a lack of institutional assistance pose real barriers to conveying key concepts such as privacy and consent to children. Participants agreed that the primary challenge is not the behaviors themselves, but rather the social and cultural context that constrains open discussion of these issues, causing many people to remain silent or uncertain when attempting to convey such content. In addition, participants identified a lack of school or counseling support and described feeling completely overwhelmed when addressing these sensitive topics. These challenges are consistent with those reported by Pryde and Jahoda,[18] in which mothers expressed persistent feelings of stress and fear stemming from individual responsibility and limited resources. In this context, the results can be interpreted in light of Lazarus and Folkman's[21] theory of coping. The lack of national-level support serves as a significant barrier to the implementation of problem-focused coping strategies, often leaving mothers to manage these

challenges on their own. In the Arab context, Alhassan and Gharaibeh[3] demonstrated that increasing mothers' awareness through targeted training leads to improved coping abilities during this developmental stage, especially when such programs are designed to reflect cultural and religious values.

In Saudi Arabia, the study by Shakuri and Alzahrani[28] is the only research to date that highlights educational challenges in this area. However, it did not directly address sexual behaviors, as the current study does, making this research a unique contribution that helps fill an existing gap in both knowledge and societal discourse. The current findings confirm that many behaviors considered "inappropriate" are not necessarily deviant but are rather expressions of natural desires that emerge in contexts marked by ignorance and lack of education. This is consistent with the findings of Gougeon[6] and Heifetz *et al*.,[7] who argue that individuals with autism have emotional and sexual desires but are often unable to express them appropriately due to limited social and cognitive skills and the absence of systematic sex education. The study's findings also underscore the importance of introducing sex education early through programs that take into account the cognitive profiles of adolescents with ASD. As recommended by Beddows and Brooks,[11] such programs should begin by focusing on social skills and gradually progress to sexual concepts in a manner that is appropriate to the age and cognitive level of the learners. This study draws attention to a frequently unexplored issue that significantly impacts the quality of life for adolescents with ASD and their families. Again, these findings are supported by Lazarus and Folkman's[21] coping framework: the absence of structured sex education places constant pressure on mothers, making it difficult to implement problem-focused strategies. Consequently, many resort to emotion-focused coping methods to alleviate the stress and anxiety associated with such situations. By centering on mothers' experiences, this study provides a clearer understanding of the complexities involved in addressing sexual behaviors within a conservative cultural context. It therefore lays the groundwork for future efforts by schools, healthcare institutions, and broader society to support families, reduce parental isolation, and ease the emotional burden associated with this challenging role.

5.1. PRACTICAL AND EDUCATIONAL IMPLICATIONS

The findings indicate that healthcare providers should offer educational programs for parents on the sexual development of adolescents with autism, along with practical training on effective coping strategies. Professional support groups should also be considered to reduce isolation among family members and to encourage collaboration with schools and the community in fostering integrated responses. In addition, the findings of this study shed light on several educational implications that could contribute to improving the quality of support offered to adolescents with ASD and their families in relation to sexual behaviors and home-based sex education. First, the study revealed that most mothers were not adequately trained or supported in addressing their children's sexual behaviors. Therefore, there is a need for guidance programs that reflect cultural and religious sensitivities while supporting families in understanding the stages of sexual development and equipping them with appropriate skills and strategies for effective guidance and communication. The results highlight the importance of integrating concepts of sexual education, introduced in a simplified and gradual manner, into educational programs provided to individuals with ASD, in a way that aligns with their developmental abilities. These should focus on concepts such as protection, physical privacy, the difference between acceptable and unacceptable touching, and personal boundaries. The study also showed that mothers often rely on their own judgment due to a lack of support within the school environment. Therefore, training educational personnel to provide appropriate sexual content through specialized training would positively enhance the educational role of schools and reduce the burden on families. Furthermore, the investigation indicated that poor communication between schools and families can potentially weaken the impact of educational interventions. These relationships could be improved through partnership building—schools can offer support and conduct regular meetings to raise awareness among families and within the broader school community about the importance of sexual education. Some mothers indicated that visual methods (i.e., pictures and videos) were effective tools for communicating sexual concepts. Therefore, the study recommends developing educational resources that consider individual differences and are presented in flexible, interactive, and indirect ways to ensure understanding without causing embarrassment. Finally, the cultural and religious specificities of Saudi society are a crucial factor in designing sex education programs. Thus, these programs should be built within a conservative educational framework, rooted in Islamic values, and focused on protection and education rather than excitement or experimentation.

5.2. LIMITATIONS

This research, like all qualitative research, has limitations that should be acknowledged when interpreting the findings. First, the research focused on a small number of mothers in a specific geographic region of Saudi Arabia and, therefore, cannot represent the experiences and perceptions of all parents of adolescents with ASD, nor of parents from different regions or cultural backgrounds. In addition, because the topic is highly sensitive—concerning the sexual development of adolescents with ASD—some mothers may have felt unable to speak completely openly, despite assurances of confidentiality. This may have limited the depth and breadth of some responses. The cultural traditions and spiritual beliefs of the participants may also have contributed to their reluctance to discuss issues considered taboo or morally inappropriate. Third, the study concentrated solely on mothers' perspectives. While their insights have been immensely valuable, the study may not capture the full range of parental experiences, particularly those of fathers or other caregivers. Involving both parents, or even teachers and therapists, could have provided more comprehensive and nuanced information about how sexual behaviors are managed within the family and broader community.

6. CONCLUSION

This study highlights the unique experiences of mothers navigating the sensitive issue of sexual development in adolescents with ASD within a conservative society. Despite

significant cultural barriers, the mothers demonstrated resilience and adaptability in supporting their children's development. The findings underscore the need for structured, family-centered sexual education programs tailored to the specific needs of adolescents with ASD, delivered within culturally sensitive frameworks.

Future research should aim to include the perspectives of fathers and other caregivers to provide a more holistic understanding. Including multiple viewpoints may reveal different challenges or coping strategies. Longitudinal studies would also be valuable in tracking changes in sexual behaviors and parental responses across developmental stages. There is also a need to design culturally relevant, community-level interventions that are practical and accessible for families navigating shifting norms and the realities of sexual development in adolescents with ASD.

Finally, as is inherent in qualitative research, the findings are influenced by the subjective nature of participants' narratives and the researcher's interpretation. While every effort was made to ensure credibility and trustworthiness, future studies employing mixed-methods or quantitative approaches could further enrich and validate the knowledge base established here.

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CONFLICT OF INTERESTS

The author declares that there is no conflict of interest regarding the publication of this study.

AUTHOR CONTRIBUTIONS

This is a single-authored article.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval for this study was obtained from the Human Research Ethics Committee at Tabuk University (approval number UT-313-161-2024). All participants were informed about the purpose of the study, their right to withdraw at any time, and the confidentiality of their responses. Informed consent for participation was obtained from all participants before data collection.

CONSENT FOR PUBLICATION

Written informed consent was obtained from all participants for the publication of anonymized data. All identifying information has been masked to ensure confidentiality.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association; 2022. doi: 10.1176/appi.books.9780890425787

2. Lyons AM, Leon SC, Phelps CE, Dunleavy AM. The impact of child symptom severity on stress among parents of children with ASD: The moderating role of coping styles. *J Child Fam Stud*. 2010;19:516-524. doi: 10.1007/s10826-009-9323-5

3. Alhassan AAH, Gharaibeh M. Mothers' awareness of sex education and training programs for children with autism. *Sex Disabil*. 2024;42:905-921. doi: 10.1007/s11195-024-09859-6

4. Corbett BA, Vandekar S, Muscatello RA, Tanguturi Y. Pubertal timing during early adolescence: Advanced pubertal onset in females with autism spectrum disorder. *Autism Res*. 2020;13(12):2202-2215. doi: 10.1002/aur.2406

5. Ballan MS. Parental perspectives of communication about sexuality in families of children with autism spectrum disorders. *J Autism Dev Disord*. 2012;42(5):676-684. doi: 10.1007/s10803-011-1293-y

6. Gougeon NA. Sexuality and autism: A critical review of selected literature using a social-relational model of disability. *Am J Sex Educ*. 2010;5(4):328-361. doi: 10.1080/15546128.2010.527237

7. Heifetz M, Lake J, Weiss J, Isaacs B, Connolly J. Dating and romantic relationships of adolescents with intellectual and developmental disabilities. *J Adolesc*. 2020;79:39-48. doi: 10.1016/j.adolescence.2019.12.011

8. Canals J, Vigil-Colet A, Chico E, Martí-Henneberg C. Personality changes during adolescence: The role of gender and pubertal development. *Pers Individ Dif*. 2005;39(1):179-188. doi: 10.1016/j.paid.2004.12.012

9. Sawyer SM, Azzopardi PS, Wickremarathne D, Patton GC. The age of adolescence. *Lancet Child Adolesc Health*. 2018;2(3):223-228. doi: 10.1016/S2352-4642(18)30022-1

10. Mukaddes NM. Gender identity problems in autistic children. *Child Care Health Dev*. 2002;28(6):529-532. doi: 10.1046/j.1365-2214.2002.00301.x

11. Beddows N, Brooks R. Inappropriate sexual behaviour in adolescents with autism spectrum disorder: What education is recommended and why. *Early Interv Psychiatry*. 2016;10(4):282-289. doi: 10.1111/eip.12265

12. Fernandes LC, Gillberg CI, Cederlund M, Hagberg B, Gillberg C, Billstedt E. Aspects of sexuality in adolescents and adults diagnosed with autism spectrum disorders in childhood. *J Autism Dev Disord*. 2016;46(9):3155-3165. doi: 10.1007/s10803-016-2855-9

13. Schöttle D, Briken P, Tüscher O, Turner D. Sexuality in autism: Hypersexual and paraphilic behavior in women and men with high-functioning autism spectrum disorder. *Dialogues Clin Neurosci*. 2017;19(4):381-393. doi: 10.31887/DCNS.2017.19.4/dschoettle

14. Sinaga A, Hufad A, Rochyadi E, Aprilia ID. Parents' experiences in dealing with the development of adolescent autistic sexuality in West Java province: A phenomenological study. *Eduvest J Univ Stud*. 2024;4(9):8298-8306. doi: 10.59188/eduvest.v4i9.6395

15. Gillberg C, Coleman M. *The Biology of the Autistic Syndromes*. 2nd ed. London: Mac Keith Press; 1992.

16. Fegan L, Rauch A. *Sexuality and People with Intellectual Disability*. Baltimore, MD: Paul H. Brooks Publishing; 1993.

17. Cridland EK, Jones SC, Stoyles G, Caputi P, Magee CA. Families living with autism spectrum disorder: Roles and responsibilities of adolescent sisters. *Focus Autism Other Dev Disabl*. 2016;31(3):196-207. doi: 10.1177/1088357615583466

18. Pryde R, Jahoda A. A qualitative study of mothers' experiences of supporting the sexual development of their sons with autism and an accompanying intellectual disability. *Int J Dev Disabil*. 2018;64(3):166-174. doi: 10.1080/20473869.2018.1446704

19. Ruble LA, Dalrymple NJ. Social/sexual awareness of persons with autism: A parental perspective. *Arch Sex Behav*. 1993;22(3):229-240. doi: 10.1007/BF01541768

20. Dardas LA, Ahmad MM. Coping strategies as mediators and moderators between stress and quality of life among parents of children with autistic disorder. *Stress Health*. 2015;31:5-12. doi: 10.1002/smi.2513

21. Lazarus RS, Folkman S. *Stress, Appraisal,*

and Coping. New York: Springer; 1984. doi: 10.1007/978-1-4419-1005-9_215

22. Brown M, Whiting J, Kahumoku-Fessler E, Witting AB, Jensen J. A dyadic model of stress, coping, and marital satisfaction among parents of children with autism. *Fam Relat*. 2020;69:138-150. doi: 10.1111/fare.12375

23. Lai WW, Goh TJ, Oei TP, Sung M. Coping and well-being in parents of children with autism spectrum disorders (ASD). *J Autism Dev Disord*. 2015;45:2582-2593. doi: 10.1007/s10803-015-2430-9

24. Siah P, Tan S. Relationships between sense of coherence, coping strategies and quality of life of parents of children with autism in Malaysia: A case study among Chinese parents. *Disabil CBR Inclusive Dev*. 2016;27(1):78-91. doi: 10.5463/dcid.v27i1.485

25. Iqbal K, Asif S, Mustafa I. Parenting role in delivering home based sexual education for adolescents with autism spectrum disorder. *Pak Lang Humanit Rev*. 2023;7(3):160-174. doi: 10.47205/plhr.2023(7-III)16

26. Lehan Mackin M, Loew N, Gonzalez A, Tykol H, Christensen T. Parent perceptions of sexual education needs for their children with autism. *J Pediatr Nurs*. 2016;31(6):608-618. doi: 10.1016/j.pedn.2016.07.003

27. Panagiotakopoulou A, Vasileiou I, Katsarou DV. Investigation of sexual education programs for adolescents with autism and the role of parents in providing support. *Materia Socio Med*. 2024;36(2):155-159. doi: 10.5455/msm.2024.36.155-159

28. Shakuri MA, Alzahrani HM. Challenges of sex education for adolescents with autism spectrum disorder from the Saudi family's perspective. *Front Educ*. 2023;8:1150531. doi: 10.3389/feduc.2023.1150531

29. Creswell JW. *Educational Research*. New Delhi: PHI Learning Private Limited; 2011.

30. Smith JA, Osborn M. Interpretative phenomenological analysis. In: Smith JA, editor. *Qualitative Psychology: A Practical Guide to Methods*. London: Sage; 2008. p. 51-80. doi: 10.1002/9780470776278.ch10

31. Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Thousand Oaks, CA: Sage Publications, Inc.; 1998.

32. Sturges JE, Hanran KJ. Comparing telephone and face-to-face qualitative interviewing: A research note. *Qual Res*. 2004;4(1):107-118. doi: 10.1177/1468794104041110

33. Bradshaw C, Atkinson S, Doody O. Employing a qualitative description approach in health care research. *Glob Qual Nurs Res*. 2017;4. doi: 10.1177/2333393617742282

34. Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health*. 2000;23(4):334-340. doi: 10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G

35. Zablotsky B, Bradshaw CP, Stuart EA. The association between mental health, stress, and coping supports in mothers of children with autism spectrum disorders. *J Autism Dev Disord*. 2013;43:1380-1393. doi: 10.1007/s10803-012-1693-7