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Pediatricians' perspectives on childhood behavioral and mental health problems in Jordan

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Abstract

Background Mental health disorders among children are highly prevalent worldwide. In most countries, the primary care physician is point of first contact with the medical system for children with these problems. There are few data from developing countries about the ways in which these children present barriers that may hinder appropriate recognition, treatment, or referral. This study sought to explore the range and expression of childhood behavioral disorders encountered by primary care pediatricians in Jordan, as well as barriers to the identification and management of these conditions.

Results We used qualitative methodology to conduct 8 focus-group interviews with physicians in Jordan. A total of 36 physicians participated. Themes that emerged from the interviews were organized into four categories. The first category described specific behavioral disorders encountered by physicians, autism being the most common and problematic. Second were themes related to system issues impacting the approach to behavioral problems. These included deficiencies in physician training and a lack of mental health services. Third were family-related issues such as parenting practices and family structure that were perceived to contribute to behavioral morbidity. Finally, sociocultural attitudes that included resistance to medicalization, reluctance to discuss behavioral issues, and interpretation of certain childhood behaviors affected help-seeking behavior and acceptance of diagnosis and treatment.

Conclusions Sociocultural and structural issues strongly influence the presentation and management of behavioral and mental health conditions among pediatric patients in Jordan. These findings have significant implications for the development of approaches to the detection and management of these problems in developing countries. The creation of robust pathways for early detection and intervention among children at risk for mental health can help reduce the burden of mental health morbidity in the region.

Keywords Pediatric, Mental health, Behavioral health, Primary care, Jordan, Middle East

Background

The WHO estimates that 10–20% of children and adolescents worldwide experience behavioral and mental health disorders [1]. These are the leading cause of disability among young people. In addition, these conditions are particularly impactful to society because they are often the precursors to adult psychiatric problems [2–6]. It is estimated that over 70% of adult mental health problems begin in childhood or adolescence [7].

A variety of evidence-based strategies have been shown to be effective in the prevention, mitigation, and

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treatment of many childhood behavioral disorders [8–12]. Effective treatment of these disorders in childhood can limit negative outcomes and abort their progression into adult mental health disorders, which are much more difficult to treat [13–15].

In the United States (US) and many other industrialized countries, behavioral and mental health disorders are usually identified and managed within the healthcare system. The initial presentation of children with behavioral complaints is usually to pediatricians or other primary-care providers [16–21]. Most of the assessment and management of these problems, including pharmacological treatment, also takes place in the primary-care setting. Only a minority of children ever receive specialized mental health or psychiatric services, at least in part because of lack of availability of these services [22, 23]. A report by the WHO indicates that although pediatricians are recognized as the main mental health providers for children, fewer than 1 in 4 receive any mental health training [24], despite the fact that behavioral problems represent a significant clinical burden in primary-care pediatric practice [25]. Other barriers to recognition and management of behavioral problems in primary care include individual patient characteristics, short visit times, and low reimbursement [20, 22, 26, 27].

There is a paucity of locally applicable data regarding childhood behavioral problems in many low-income countries; gaps in evidence-based treatment delivery have been identified as a major obstacle to the management of mental health problems in many parts of the world [28]. Local data are especially important because of wide cultural variations in the degree to which specific childhood behaviors are considered problematic [29–31]. It has been argued that cultural factors play a major role in the core definitions of mental health disorders. This may have a bearing on the application of psychiatric diagnoses in different cultures [32]. Other social and cultural factors include perceptions of stigma around mental health and the characteristics of the community, the availability of resources, and of the medical system as a whole [33–36]. A "research to practice" agenda is urgently needed to bridge the divides in the treatment of psychiatric disorders globally [15].

The ways in which different cultures and societies conceptualize mental and behavioral disorders largely determine the quantity and quality of resources that are provided to those living with these conditions. This in turn determines the availability, quality, and uptake of treatment interventions. Additionally, researchers have questioned the wisdom of assuming that diagnostic or treatment approaches developed in the west can be generalized to other cultures [37]. Therefore, exploring cultural perceptions of behavioral and mental health conditions is critical when addressing these conditions in different cultures.

Comprehensive population-level data focusing on pediatric behavioral issues in the Arab world are lacking. However, the few studies that are available do suggest high rates of specific disorders. A meta-analysis of studies on attention-deficit/hyperactivity disorder (ADHD) in Arab countries suggested a prevalence between 1.6 and 16% [38]. A 2018 paper that examined a sample of adolescent Jordanian students reported that 11.7% had psychiatric or behavioral disorders; most common were anxiety and depression (14%), followed by conduct problems (12.5%) and hyperactivity (7%) [39]. Another study from Egypt found a high prevalence (34.7%) of abnormal scores on the Strengths and Difficulties Questionnaire, a measure of observed problematic behaviors [40]. More studies indicated a high burden of behavioral disorders among children and families seeking care at hospitals and other healthcare facilities [41, 42].

A large epidemiological study in the Middle East and North Africa (MENA) region found that families faced with behavioral issues preferentially turned to relatives, friends, and other community resources for advice. Frequently, interventions by traditional or religious healers were also sought; if these were unsuccessful, a minority of families then turned to the formal medical system (usually a primary-care physician) [43]. Little is known about the ways in which these patients present to pediatricians in clinical practice or about what conditions are most commonly seen and in what contexts. A previous study of barriers to the diagnosis and management of mental health issues among adults in Jordan suggested that deficits in provider training, patient reluctance to accept the diagnosis, and social perceptions of the role of the physician were among the most important impediments to the recognition, diagnosis, or management of these patients [44].

This study aimed to explore behavioral and mental health disorders and barriers to their diagnosis, prevention, mitigation, and treatment that are encountered by pediatricians in Jordan. The use of qualitative methodology allowed us to document the full range of morbidities observed as well as the physicians' perceptions of and attitudes towards these problems. Understanding the sociocultural factors that affect clinical presentations of patients and the attitudes, practices, and challenges encountered by pediatricians who care for these patients is a first step in developing effective approaches to detect and treat childhood mental health problems in Arab countries.

Jordan shares sociological characteristics with many other Arab countries. Strongly traditional and communal values predominate. Legally and culturally,

Jordan continues to be highly patriarchal, although various forces are beginning to result in societal change [45]. Jordan also faces many of the same societal pressures as other developing countries, including urbanization, the loss of agrarian lifestyles, and changes in the social roles of women, who increasingly work outside the home [46] but who are simultaneously held primarily responsible for raising children [47]. The position of women with regard to child rearing has been made even more difficult in recent years by social trends away from the extended family networks that had previously provided guidance, support, and stability for all their members. Mothers of younger children are particularly impacted, with the loss of ready advice and practical help that had previously been available from an extended community of relatives [48].

In addition to loss of family support, rapid growth of media access has greatly increased the exposure of the population — children in particular — to an expanded menu of role models and experiences. This is of concern to parents, who, while recognizing the potential benefits to their children, also worry about the harms of such exposure [49].

Medical care for children in Jordan is provided through several overlapping care delivery systems. The government system provides health care without cost to all children up to the age of 6 years. Most of the physicians working within this system are general practitioners. The United Nations Relief and Works (UNRWA) health system provides free primary health care to children who are Palestinian refugees. Additionally, there is a robust private fee-for-service medical system that provides the majority of care for much of the middle- and upper-income segments of the population.

In common with many developing countries, Jordan's medical system is to some extent a legacy of its colonial past. Much of the technology, training, and skilled manpower required for the development of healthcare systems were imported to the region by colonial governments that included France and Great Britain. While high-quality instruction has become increasingly available in local medical schools over the past 50 years (the first medical school in Jordan opened in 1971), the medical system remains organized along the lines of systems in the industrialized West [50]. This allows the rapid and seamless dissemination of medical treatments, technologies, and knowledge to be transferred and practiced locally; however, this system also tends to incorporate many culturally bound assumptions and diagnostic categories that have been imported from Western countries. In particular, the approach of mental health conditions may be particularly problematic and prone to cultural framing and category fallacies. In Jordan, many people continue to consider behavioral and mental health challenges to be evidence of a moral failing or the result of an inadequate upbringing by their family of origin [51, 52].

Methods

Study design

We used a qualitative descriptive phenomenological research methodology to explore the experiences and attitudes of pediatricians towards behavioral disorders in children. Our aim was to study the phenomenon of behavioral problems in children from the perspective of pediatricians, avoiding taken-for-granted assumptions and focusing on the personal perspective of pediatricians in Jordan. A phenomenological approach was selected because of its suitability to extract the universal essence of a phenomenon experienced in common by a group of individuals [53].

Study population

Eight focus-group interviews were conducted from October 10 to December 30, 2019, with groups of pediatricians in Amman, Jordan. We used focus groups to collect data because we anticipated that the interaction among the interviewees would generate additional in depth discussion, thereby yielding better information [54].

Jordan is a low- and middle-income country (LMIC) with a population of 9 million. About 40% of the population is under 15 years of age [55].

The focus groups were chosen to represent a variety of practice settings and were recruited using purposive sampling. They ranged from 1 to 10 individuals and included 3 groups of community pediatricians in private practice, 2 groups of government-employed pediatricians working for the Ministry of Health, one group of university-based academic pediatricians, and 2 groups of pediatric house officers in training. The total number of interviewees was 36; 22 (61%) were females.

Research procedures

The research protocol was approved by the ethics boards of the University of Nebraska and the University of Jordan. Verbal informed consent was obtained from the participants, and they were provided with a narrative information sheet. Signed consent waiver was approved by the IRB to minimize the risk of loss of confidentiality because the informed consent document was the only link of the participants to the research. The interviews, which were conducted in the physicians' workplaces, lasted between 51 and 75 min and were recorded, transcribed, and translated verbatim by the primary investigator (AN).

An interview guide was developed by the investigators and used to guide the interviews. The primary interview question was as follows: "What types of pediatric emotional/behavioral or family and psychosocial problems do you encounter in your practice?" Follow-up and probe questions were asked as needed. The interviews continued until inductive thematic saturation was achieved.

Data analysis

The data were analyzed by the investigators, using a thematic approach as outlined by Braun and Clarke [56]. The authors read the transcripts individually and generated preliminary codes. The group then met regularly rereading and reviewing each transcript, reconciling, and finalizing the codes. The codes were then organized into broader themes using an inductive approach. Through an iterative process, the themes were reviewed and refined until consensus between the three investigators was achieved. The manuscript was reviewed, revised, and approved by all authors. In a few areas of the transcripts, there were Arabic words or phrases that could not be directly translated to English. All three coauthors (who are bilingual and culturally experienced) reached consensus on the meaning of these words or phrases. NVivo 12 software was used to assist with data management and coding.

Results

The authors identified four distinct themes: descriptions of specific behavioral disorders, themes related to the family, themes related to the medical system, and sociocultural themes. There were some differences in thematic emphasis in different groups, but there was a high level of agreement among all the groups on each of the themes.

Behavioral and psychosocial conditions encountered by physicians

Autism

There was general consensus that autism was the most prevalent serious neurobehavioral condition that pediatricians encountered. It was also perceived to be more common than ADHD. Group members also reported their perception that the prevalence of autism has increased significantly in recent years. They reported low confidence in their ability to make a diagnosis of autism. Lack of referral options for the management of autism was also problematic. Several interviewees felt that the few available diagnostic and treatment centers were inadequate to meet patients' needs and were generally unaffordable for the average Jordanian family.

ADHD

This condition was cited as a bigger problem for physicians working in secondary or tertiary care settings, since suspected cases were immediately referred to higher levels of care by community physicians. As in autism, interviewees indicated that they lacked confidence in making the diagnosis. They also pointed to a lack of affordable resources for diagnosis and management.

Patients did not favor pharmaceutical management of ADHD, and physicians often reported discomfort in prescribing these medications: "We don't like medications either," and "Prescriptions need a special license [and] stamp." Severe cases were usually referred to a neurologist, who made the diagnosis and prescribed medications. Physicians observed that most children with ADHD end up going untreated: "They do not get treatment, their education suffers, they quit school."

Screen overuse

Physicians were unanimous in their perceptions that excessive use of screens — particularly mobile phones and tablets — in young children was resulting in high rates of speech delay and impairments in social and emotional skills: "I call it 'mobile autism'. You feel the child does not have autism but acts like he does… I think it affects social interaction." The child loses their ability to interact with other people. They lose interest in their surroundings. Moreover, they reported that overuse of screens was common at all socioeconomic levels. Many perceived that parents, especially mothers, used screen media to manage their children's behavior while they attended to other tasks.

Suicide

Reports of attempted or completed suicides, although uncommon, were mostly restricted to physicians who worked in the inpatient setting. These physicians reported that poverty and family dynamics issues were the main causes of this condition. Authoritarian parenting practices were also thought to contribute to suicidal behavior, particularly among adolescent girls.

Child abuse

Medical neglect was most commonly cited in this category and was reported to be especially common in children with special healthcare needs. Again, it was perceived that socioeconomic factors were primary drivers of this problem.

Masturbation

This was mentioned as a problem in two groups. Although participants acknowledged that masturbation

is a developmental stage variant, they had difficulty with the management of this condition due to societal intolerance, sensitivity, and the sexually charged nature of the condition. They reported feeling uncomfortable counseling parents and schools about masturbation and were uncertain about how best to manage it.

Gender dysphoria

Among the more experienced physicians, there was agreement that this condition was being seen more commonly than it had in previous decades. However, there was disagreement as to the cause. Some of them felt strongly that it was due to "confusion" sown by parents by not providing their children with clear gender-appropriate guidance, such as dress and behavior. This was exemplified by the traditional practice of dressing young boys as girls until 3 years of age to protect them from being harmed by the supernatural force of envy or "the evil eye." Some thought that this custom contributed to gender-identity confusion and mentioned that they advised parents against it. Others were less certain that the cause was environmental and acknowledged the possible biological nature of these conditions. Overall, the participants did not feel that tolerance of the condition was a viable option.

Depression and anxiety

There were few mentions of these conditions in primary care. However, the observation of many pediatricians was that the relative absence of these conditions was due to poor detection since most adolescents obtained care from internists or general practitioners who were less attuned to the emotional needs of children and adolescents.

Feeding and eating disorders

Physicians described several commonly encountered problems with eating, including picky and restricted eating patterns. Other issues were related to overeating and junk food consumption, which was exacerbated by the ready availability of home-delivery services and by lax parental control and supervision. Anorexia nervosa and bulimia nervosa were perceived to be rare.

Family-related themes

Physicians in all groups commented on deficits in parenting. These included problems with authority within families and a lack of consistency in enforcing rules set for children, which resulted in a lack of respect for authority as well as in eating and sleeping problems. These difficulties were especially acute in homes with parental conflict or divorce, which many of the participants reported to be increasingly frequent.

Several groups mentioned the role of the extended family as a support system for both parents and children on one hand and as a disruptive influence on the family hierarchy on the other. The prominent role of the grandparents, particularly the paternal grandmother, in making decisions could lead to the marginalization and disempowerment of the mother: "… when grandmothers come to the clinic with families, they usually are dominant, and they are the decision makers."

In addition, new patterns of family formation, including an increased rate of nuclear-family life, meant that children tended to have less supervision than previous generations did: "… there was a role for the extended family, now that is not available anymore. Grandmas and grandpas and uncles, it used to be that the family lived together, and the mother would say something, and the grandmother would say something, and the uncle gives advice, now everyone is on their own."

System-related themes

A common complaint by clinicians was that they lacked the knowledge and training to deal with behavioral and psychosocial issues. They also reported competing clinical priorities, which prevented them from dealing with the task of attending to behavioral or psychiatric problems. Some reported at times suspecting the presence of a behavioral problem, but not addressing it because they felt unable to deal with it or anticipated a lack of success.

Poor access to mental health services due to high cost, poor quality, long waiting times, or a combination of these factors was reported. There was a sentiment that pediatric mental health was not prioritized by the system: "There is a huge shortage in everything, and behavioral health doesn't get a turn."

Sociocultural factors

Several subthemes were identified in the following category:

Traditional expectations of mothers

One important issue was related to women's disadvantaged position in society. Increasingly, economic imperatives result in the need for women to work outside the home, often leading to the inability to devote emotional energy to their children's problems.

Mothers also tend to be blamed for their children's negative health outcomes, whether physical or behavioral. Often if a child is born with anomalies or has a behavioral problem, the mother may be in danger of being divorced

as a consequence: "She is in the weaker position in the relationship. There is not much support for her, so even if the father is in the wrong, all blame will go to the mother, I guess this is how it is in our culture."

Social attitudes towards children's behavior and behavioral problems

Some behaviors that might be labeled as abnormal or problematic among children in other cultures might be normalized, tolerated, or ignored by families and society in Jordan: "It is surely a matter of definition … the definition of what is hyperactivity depends on the environment." Other types of behavior may be concealed for fear of stigma: "Families are reluctant to bring behavioral problems to the doctors because of stigma. They try to cover it up." Behavioral and mental health issues are subject to stigma and may reflect poorly on the family: "When the child has a behavior problem, this will frankly be a disaster for the family, and the mother will be so embarrassed. The child will scandalize the family and they crack down on him which makes things worse."

Economic issues

Another subtheme was related to the economic environment. Difficulty making ends meet places families under stress, thus reducing the material and emotional resources parents can devote to their children and exacerbating behavioral problems: "Families are stressed, the whole society is stressed."

The built environment

Some focus-group participants surmised that the environment that many families lived in aggravated behavioral issues in children. Overcrowding and a lack of recreational venues were seen as contributors to this problem.

Societal change and globalization

Another important subtheme that emerged was the ways in which cultural transformation, fueled by globalization, was changing the behaviors and expectations of children and adolescents. The availability of information and role models and the diversity of lifestyles seen in the media, for example, were seen as both an opportunity and a danger. Families often felt at a loss on how to best confront these changes. This dynamic led to an increase in intergenerational conflict and alienation which further increased stress and reduced healthy coping strategies among families and children: "Life is getting more complicated, with the Internet and social media and everything, the society has changed."

Societal attitudes toward physicians and the biomedical model

Some participants discussed parental and community attitudes toward physicians and modern biomedicine and suggested that a combination of factors that included mismatches in expectations, lack of trust, and strong traditional beliefs resulted in suboptimal communication and treatment of behavioral issues: "They trust their neighbors and friends more than they trust the doctor." They reported that parents rarely present with an explicitly behavioral complaint. It is usually brought up indirectly or as a secondary issue: "Most frequently, the family is there because of another problem." Medicalization of these problems may be strongly resisted: "Most people don't think we are here for behavioral problems. You are here to give them medications and that's it. If you think about giving behavioral or social advice, they act like they do not want to hear these things from you, no." Family and community attitudes toward certain treatments, such as medications, may be stigmatized, and it may be difficult to recommend or implement certain treatments.

Discussion

Our data suggest that Jordanian pediatricians routinely encounter patients with behavioral issues; our study subjects uniformly report difficulties in approaching and managing these conditions. These difficulties include a lack of behavioral and mental health training, community narratives that are at odds with biomedical models, and deficiencies in the medical system that make certain treatment options and appropriate referrals problematic. These findings are consistent with earlier research suggesting that patient- and system-related factors are among the most significant obstacles to management of behavioral issues in the primary care setting [26, 57]. Physicians interviewed in our study stated that they received little mental health training and lacked confidence in treating these conditions. Deficiencies in this training among pediatric practitioners has been a persistent problem globally [28]. For example, one recent study from the US reported that only 18% of pediatric residency graduates felt confident in treating behavioral and mental health conditions in children and adolescents [58].

The high rate of referral of children with autism to neurologists and not psychiatrists was noted. Several factors could account for this observation. These include the severe shortage of psychiatrists in Arab countries [59] or the general societal reluctance to accept classification of problems as psychiatric. This makes the referral to a neurologist a less stigmatizing choice.

Another finding of our study highlights community perceptions that behavioral problems do not fall under the purview of "medicine" — but they are instead considered to be the result of failed parenting, reflecting on the patient or their family.

Participants also noted a growing trend of excessive screen use by young children, impacting their linguistic, social, and emotional development. This observation is consistent with evidence of the negative impact of screen media on child development [60–63].

Our study — the first of its kind in the region — seeks to generate questions that can be tested and explored in subsequent investigations. These may include the true prevalence of behavioral concerns among children presenting to primary care in Jordan and the accuracy of physicians' perceptions that parents are unwilling to voice their concerns about their children's behavioral problems. Developing a greater understanding of the reasons for reported difficulties in evaluating and treating these children will also be important in creating educational programs to remedy these deficits. Additionally, our data suggest that the community may reject the medicalization of mental-health and behavioral disorders in children. This may have implications for determining how best to culturally frame and treat these conditions. The qualitative design of this study and the purposeful sampling methodologies may limit the generalization of our findings. Further studies will be needed to develop evidence-based interventions that are concordant with local attitudes, practices, and available resources.

Conclusions

Rates of mental and behavioral health problems are continuing to grow worldwide, exacerbated by forces such as culture change, globalization, and economic adversity. The Middle Eastern region has a high burden of mental health morbidity. This is coupled with negative cultural attitudes towards those suffering from mental health problems and a severe shortage of mental health professionals in the region. While early detection and intervention for children with behavioral and mental health problems have the potential to reduce rates of mental illness, our research has highlighted several barriers to achieving this. The primary barrier appears to be inadequate mental health education and experience among pediatricians. In addition, systemic barriers, unique social dynamics, and clinical presentations that may require novel approaches to framing, detection, and intervention in this setting play an important role. Developing a road map for the creation of culturally tailored and effective approaches and interventions in primary care has the potential to significantly reduce childhood mental health morbidity with an aim to optimize human potential in the region.

Abbreviations

WHO	World Health Organization
MENA	Middle East and North Africa
UNRWA	United Nations Relief and Works Agency
LMIC	Low- and middle-income countries
ADHD	Attention-deficit hyperactivity disorder

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Authors' contributions

Dr. AN, conceived the research concept, developed the research protocol, and designed the research methodology, led all focus groups and participated in all elements of data collection, transcribed and translated the focus-group interviews, participated in data analysis, wrote the initial manuscript and subsequent revisions, and approved the manuscript as submitted. Dr. AM participated in the conceptualization of the research idea, participated in the recruitment of the research subjects and in focus-group interviews, participated in data analysis, and reviewed and approved the final manuscript as submitted. Dr. LN, participated in the conceptualization of the research idea, participated in the recruitment of the research subjects and in focus-group interviews, participated in data analysis, participated in review and revision of the manuscript, and approved the final manuscript as submitted. The authors read and approved the final manuscript.

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Availability of data and materials

The transcripts are not available publicly but are available from the author upon reasonable request if necessary. We decided not to make the data available publicly to protect the anonymity of the subjects since while no names are attached, the context may provide clues to the identity of the contributors and would this be a breach of confidentiality.

Declarations

Ethics approval and consent to participate

The research protocol was approved by the ethics boards of the University of Nebraska and the University of Jordan. Verbal informed consent was obtained from the participants, and they were provided with a narrative information sheet. Signed consent waiver was approved by the IRB to minimize the risk of loss of confidentiality because the informed consent document was the only link of the participants to the research.

Competing interests

The authors declare that they have no competing interests.

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