Jordan Medical Journal

ORIGINAL ARTICLE

The Impact of Parental Beliefs and Social Media-Driven Misconceptions on Pediatric Healthcare Decisions in Jordan

Dana Alantari[1], Ahmad S. Haider[2*], Islam Husienat[3], Ala' Elayyan[1], Abdullah Al-Momani[2], Dana Sakaji[1], Yasmeen Olimat[1], Reem Chabaan[1], Maysa Shaheen[1], Bara Yousef Shehadeh[1], Salma M. Obeidat[4], Nour Qasim Barakat[5]

[1] Department of Pediatrics, School of Medicine, The University of Jordan, Amman 11942, Jordan.

[2] Applied Science Private University, Amman, Jordan.

[3] King Abdullah University Hospital, Jordan University of Science and Technology, Jordan.

[4] School of Medicine, The University of Jordan, Amman 11942, Jordan

[5] Department of Internal Medicine, School of Medicine, The University of Jordan, Amman 11942, Jordan.

***Corresponding author:**

a_haidar@asu.edu.jo

Received: May 3, 2025

Accepted: Jun 12, 2025

DOI:
https://doi.org//10.35516jmj.v60i1.4238

Abstract

Introduction: Pediatric healthcare decision-making is influenced by intersecting and often conflicting factors. The coexistence of traditional parental beliefs and the modern digital landscape has altered this process and produced a novel paradigm which greatly impacts regions where cultural heritage guides medical practices and behaviors. This paper examines how parental attitudes built on traditional beliefs and social media affect healthcare decisions for pediatric patients aged twelve and below.

Methods: The paper employs a structured 18-item questionnaire distributed to 200 Jordanian parents to gauge beliefs, digital health literacy, and online misinformation influence healthcare-seeking behavior.

Results: The results indicated a considerable influence of traditional beliefs, as 48% of parents favored traditional remedies, and 35% consulted family elders before seeking professional advice. On the other hand, 62% stated they frequented social media for information on child healthcare, while 55% had followed online advice without medical consultation. Moreover, only 45% of the parents expressed confidence in their ability to distinguish credible information from misleading content.

Discussion: The analysis through hypothesis testing indicated that lower education levels and higher social media usage rates significantly delayed medical consultations and were related to a reliance on unverified health advice. In contrast, high media literacy levels resulted in increased caution, leading to more professional-aligned decisions.

Conclusions: The paper suggests enhancing the digital presence of pediatricians to increase the credibility of online information. The paper recommends the integration of evidence-based health messaging in popular platforms such as WhatsApp and Facebook.

Keywords: Pediatric healthcare; Parental beliefs; Social media myths; Jordan; Health misinformation; Public health.

INTRODUCTION

The health and well-being of children are significantly influenced by the decisions made by their parents and guardians [1]. As children are not expected to care for themselves, it falls on their legal guardians to ensure they are well looked after. This involves day-to-day care that provides for their basic needs as well as ensuring access to proper healthcare. Nevertheless, pediatric health care is a specialised and complex issue that requires proper decision-making. Although the responsibility for such decisions falls on parents, they may not always be the best equipped to handle these situations. These decisions may have significant consequences and must thus be informed by medical facts. It is possible that the beliefs of parents have the greatest influence, even when they are not properly informed.

For instance, parents have long relied on the experiences shared in their communities and advice passed down from community elders. Thus, parents often rely on traditional, cultural, and even religious beliefs as sources of information on healthcare. A newly emerging source that is gaining significant traction is the digital landscape that parents can access online.

While seeking advice and information from online sources is accessible and easy for parents, their accuracy is not guaranteed [2, 3]. These sources are unreliable as they are unverified. Yet, parents often rely on them for these crucial decisions.

This can negatively impact pediatric healthcare as it obstructs proper treatment and obstructs professional care. For example, some parents may prioritize home remedies over proper medications without assurance of their effectiveness. In other cases, medications may be given without prescriptions. In some instances, these medications may be leftover from a different ailment. Moreover, in the case antibiotics are given for a nonbacterial illness, antimicrobial resistance could be developed, which entails that the medication caused harm rather than improved the child's health. Another issue is the delay in seeking professional care; this stands in the way of children receiving the proper, often urgent, care that they need.

Another issue that may arise with the spread of misinformation, with a lack of proper health literacy, is that false beliefs may lead parents to undermine the knowledge of pediatricians. This complicates the task of pediatricians who can no longer practice their work unchallenged. This saddles them with the additional tasks of explanation, reeducation, and convincing concerned, misinformed parents.

As a result, efforts and research are made into these influencers of parental beliefs and how they impact pediatric healthcare. While this issue has been discussed in previous studies, little attention has been given to the Jordanian context. Since culture and tradition are valued in the region, with social media also cementing itself in day-to-day life, the region becomes an area of interest for this topic. Furthermore, these issues have typically been examined separately, even though they overlap in the modern landscape. This study aimed to fill this research gap by exploring both issues together in the untapped context of Jordanian child healthcare. The study hoped to achieve this by answering the following research question regarding influences on pediatric healthcare decisions in Jordan.

What is the impact of parental beliefs and social media-driven misconceptions on pediatric healthcare decisions in Jordan?

In collecting evidence to answer this

question, the study intended to give insights into the dual influence of tradition and digital advancement on pediatric healthcare decisions made in Jordan. This was done with the hope of improving health literacy in a culturally sensitive manner, which could improve the way pediatric healthcare is communicated and provided in the region.

Extensive research in Jordan has demonstrated that parental stress and emotional responses to childhood illness play a pivotal role in shaping healthcare decisions [4-6]. Building on these findings, the present study explores how such beliefs—when further influenced by social media-driven misconceptions—impact pediatric healthcare choices within the Jordanian context.

Several studies have underscored how parental perceptions, particularly in non-Western contexts, may lead to delayed care, misuse of medications, or alternative health practices that deviate from medical guidelines.

The beliefs and education of parents and legal guardians form many decisions made in pediatric healthcare. Unfortunately, these beliefs may not be based on fact as they stem from unreliable and non-credible sources. For instance, they may be shaped by culture and tradition, or they may come from modern sources such as online content, which may be inaccurate.

Arabiat et al. [7] found that beliefs have a strong influence on healthcare decisions. These beliefs could be fatalistic core beliefs or secondary beliefs such as biomedical, supernatural and situational beliefs. Hence, self-prescribed antibiotics and herbal remedies are common in the Arab world. These decisions are more likely to be influenced by family based on multiple variants, including the intensity of the illness and its perceived risk, previous family experience, cost and availability, and efficacy.

Kubanji [8] affirmed that religious and cultural beliefs play an undeniable role in the provision of healthcare, encouraging the development of a scientific understanding that is holistically intertwined with these beliefs.

Al-Yateem et al. [9] conducted a survey among twenty-five mothers in the UAE, which confirmed that mothers from various educational backgrounds believe in a connection between culture, religion, and healthcare. This resulted in the utilisation of home remedies, such as herbal remedies, and the use of the Quran often before professional consultation. In many cases, the mothers found these treatments effective and comforting. Yet, in cases where such treatments were ineffective, delays were caused in the seeking of proper care.

When it came to online content, Yeung et al. [10] asserted that many people resort to social media to communicate medical information, which often leads to the dissemination of misinformation. Additionally, Khullar [11] concluded that medical misinformation has become a rampant online phenomenon, increasingly so in recent years. Furthermore, this misinformation also negatively influenced healthcare practices by increasing unproven treatments, nonadherence to mitigation measures, and vaccine hesitancy.

Furthermore, Frey, Bonfiglioli, and Frawley [12] remarked that more than 80% of Australian parents sought healthcare advice through social media before consulting medical professionals. This was explained through the ease of accessibility to this information and a desire for emotional support and reassurance. However, these

sites should not be treated as reliable sources, as the information they contain is not uploaded by experts. Nevertheless, some parents still act as if this information is trustworthy to the degree that they challenge medical advice from their physicians based on this content.

Macauley et al. [13] similarly maintained that social media could have both positive and negative influences on pediatric healthcare. For instance, it can make public health advocacy and professional education more accessible, yet misinformation is as readily available as fact and privacy and professionalism could be sacrificed as well. Thus, pediatricians may have their knowledge and expertise challenged by misinformed parents. This burdens pediatricians with the task of re-educating and reassuring parents as well as reestablishing the authority of professional healthcare and evidence-based information.

On a similar note, Vilimelis-Piulats et al. [14] observed an increase in the degree to which medical issues are discussed on social media. Some of these issues include drug and medication-related problems, such as adverse reactions or medication errors. Again, ease of access to information is juxtaposed with its reliability as anecdotal evidence and factual evidence are given rivaling value.

Moreover, Panda and Panda [15] affirmed the negative impact of false beliefs on child healthcare, specifically in the case of asthma. The study showed that even parents with high levels of education could prioritize home remedies over proper inhaler usage. This highlights that miseducation can affect parents of any background.

Çelik and Güzel [16] observed a similar phenomenon that showcased how misguided beliefs could lead parents to inappropriate decisions. Turkish parents experienced "fever phobia", which exaggerates the risks of fevers. This leads parents to administer unnecessary or premature medications and other inappropriate management strategies.

Al-Shawi, Darwish, Wahab, and Al-Shamlan [17] noted that similar practices occur in Saudi Arabia, where the misconceptions of parents led to self-prescription of leftover medications. Moreover, when antibiotics were involved, antimicrobial resistance could develop if the illness was nonbacterial. As a result, these well-intentioned concerns could cause more harm than good.

Bryan, Evans, Morishita, Midamba, and Moreno [18] found that parents often frequented social media to research pediatric health, with many believing in their reliability and accuracy, with only some verifying this information through pediatricians and health experts. Additionally, Ward [19] found that many parents supported and encouraged pediatricians to incorporate social media into their practice as an educational resource.

The examined literature confirmed that parents often come across unreliable sources from both traditional influences and digital media. This emphasized the need to examine the dual influence of these areas on pediatric healthcare decisions to combat the dangers of misinformation.

MATERIALS AND METHODS

Research Design

This study examined how parental beliefs and social media influence pediatric healthcare decisions in Jordan through a quantitative descriptive approach. The study employed a structured questionnaire made up of 15 items, which was distributed to 200

Jordanian parents (124 mothers and 76 fathers) with at least one child aged between 0 and 12 years. The use of a structured questionnaire allowed for the systematic collection of data from a large number of participants, helping identify general patterns and trends. The collected data were analyzed using descriptive statistics (means, frequencies, and percentages) to summarize demographic characteristics and general response patterns. All statistical analyses were conducted using SPSS version 30.

Ethical Approval Statement

The research was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Ethical approval was obtained from the Institutional Review Board of The Applied Science Private University/ Jordan, under approval number FOAH 10/2023 dated 5/10/2023.

Participants and Instrument

The study sample of this study consisted of Jordanian parents with children aged between 0 and 12 years, with 200 participants in total. This number was deemed sufficient to ensure variability across demographic factors such as age, education level, and number of children, while remaining manageable within the scope and timeframe of the study.

The participants were mainly selected from three major cities, Amman, Irbid, and Zarqa, through convenience sampling to ensure diversity in educational and socioeconomic backgrounds. The inclusion criteria required that participants be parents residing in Jordan with at least one child in the specified age group and capable of completing the questionnaire in Arabic.

The data collection instrument was a structured, self-administered questionnaire developed based on previous studies in pediatric health decision-making and social media usage. The questionnaire consisted of four main sections: demographic information, parental beliefs, social media usage, and healthcare decision-making.

Most items were rated on a five-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree.” The questionnaire was developed in Arabic, the native language of the participants.

Questionnaire Validity and Reliability

To guarantee the questionnaire was credible and the research findings were representative, the questionnaire was put through an in-depth process of content validation and reliability testing.

The development of the questionnaire began with the creation of a draft based on the relevant literature that discussed parental beliefs, digital health literacy, and social media misinformation in pediatric healthcare. The constructs and items were primarily adapted from previously validated instruments used in similar healthcare and communication studies. After which, the content of the questionnaire was further validated by a panel of three experts in pediatric medicine, social media research, and public health education. The panel evaluated each item for relevance, clarity, and cultural appropriateness within the Jordanian context. Refinements were intended to increase participant comprehension and were made based on their feedback in the form of modifications in language, simplification of terminology, and the addition of culturally specific examples.

Next, a pilot test with 30 Jordanian parents was conducted to assess the clarity, flow, and interpretability of the survey items. This led to minor adaptations, specifically in the phrasing of items related to vaccine hesitancy and the

role of elder consultation in decision-making.

To ensure the internal consistency and reliability of the questionnaire, Cronbach's alpha was calculated for each of the five constructs, as well as for the overall instrument. The results demonstrated high reliability, with the total scale yielding a Cronbach's alpha coefficient of 0.89, well above the commonly accepted threshold of 0.70. Each construct independently met or exceeded this benchmark, ranging from 0.74 to 0.86, which confirms that the items within each category consistently measured their intended conceptual domains. This strong internal consistency across constructs supports the robustness of the survey instrument for analysing parental beliefs and behaviors related to pediatric healthcare. The detailed reliability coefficients are presented in Table 1.

Table 1. Reliability of Questionnaire Constructs Based on Cronbach's Alpha

Construct	No. of Items	Cronbach's Alpha
Parental Health Beliefs	3	0.81
Social Media Usage	3	0.86
Healthcare Decision-Making	3	0.79
Perception of Pediatricians	3	0.74
Misinformation and Awareness	3	0.77
Total Questionnaire	15	0.89

Table 1 presents the internal consistency reliability scores for each thematic construct in the questionnaire. All constructs met the threshold of $\alpha \geq 0.70$, indicating satisfactory internal reliability.

A preliminary exploratory factor analysis (EFA) was conducted on the pilot sample to evaluate construct validity. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.83, and Bartlett's test of sphericity was significant ($p < 0.001$), indicating the suitability of the data for factor analysis. Furthermore, skewness and kurtosis values for each construct were within the acceptable range of -2 to +2, indicating a normal distribution of responses.

Hypotheses

H1: Parents with lower education levels are more likely to trust traditional remedies over modern medicine.

H2: The more time parents spend on social media, the more likely they are to delay pediatric visits.

H3: Parents who frequently use Facebook or WhatsApp for health advice are more likely to act without consulting a doctor.

H4: Trust in pediatricians is negatively influenced by belief in the accuracy of social media content.

H5: Parents with higher digital literacy (ability to evaluate health content) are less likely to follow harmful online advice.

Research Procedure

The study began with research on previous literature, which informed the development of the questionnaire. After which, the questionnaire was designed with 15 items based on a 5-point Likert scale. This was followed by the validation of the questionnaire through expert review by three specialists in pediatrics and health communication. To ensure reliability, clarity and cultural appropriateness, a pilot study was conducted with 30 participants. The finalised questionnaire was then distributed

on a larger scale, through which 200 valid responses were collected. Ethical research practices were ensured by maintaining anonymity and securing voluntary participation. The collected data was then organised and analysed using Excel, and descriptive statistics and Cronbach's Alpha were applied for reliability testing. Finally, findings were linked to existing literature to identify patterns, confirm theoretical assumptions, and highlight new insights into parental decision-making behavior.

RESULTS

This section presents the analysis of the collected data and discusses the results. It begins by outlining the demographic characteristics of the respondents, followed by a detailed analysis of their responses to each questionnaire item. The final subsection reports on the results of hypothesis testing.

Sample Characteristics

A diverse sample was selected to represent a more inclusive vision that connects demographic variables with the types of decisions made by Jordanian parents. Table 2 below presents the demographic variables of the 200 parents who participated in this study, representing a diverse cross-section of Jordanian society regarding age, gender, education, employment status, geographic location, and digital behavior.

Table 2. Demographic Summary of Respondents

Variable	Category	Count	Percentage (%)
Gender	Male	76	38
	Female	124	62
Age	Under 25	60	30
	25–34	80	40
	35–44	40	20
	45 and above	20	10
Number of Children	1	80	40
	2–3	90	45
	4 or more	30	15
Education Level	High school or below	56	28
	Bachelor's degree	104	52
	Master's degree or higher	40	20
Employment Status	Employed	92	46
	Unemployed	60	30
	Homemaker	48	24
City of Residence	Amman	76	38
	Irbid	40	20
	Zarqa	24	12
	Other	60	30
Internet Use Per Day	Less than 1 hour	40	20
	1–3 hours	60	30
	More than 3 hours	100	50
Most Used Platform	WhatsApp	140	70
	Facebook	110	55

Variable	Category	Count	Percentage (%)
	Instagram	70	35
	TikTok	30	15

The gender distribution indicated a higher degree of female participants at 62%. This lean towards female respondents reflected the gender-based distribution of familial roles in Jordanian families, where mothers are the primary caregivers for children.

The age distribution of the respondents represents a high number of early-age parents. This aligned with the study's goal of understanding modern parenting beliefs, especially those who frequent the internet.

The number of children of the participants in the study indicated a balanced sample of experienced and first-time parents, with 45% having 2–3 children and 40% having one child.

A high education level was evident in the study sample, with a majority (52%) holding a bachelor's degree, and an additional 20% having completed postgraduate education. This emphasised the fact that higher education does not eliminate the issues discussed in this study.

The sample was also balanced when it came to employment status, representing different groups which spend varying amounts of time with their children and browsing the internet.

The geographic distribution included participants from major urban centers such as Amman (38%), Irbid (20%), and Zarqa (12%), with 30% coming from other cities and towns. This urban-rural balance adds geographic diversity and allowed for comparisons across different healthcare infrastructure contexts.

In terms of internet behavior, most respondents indicated that they used the internet for multiple hours on a daily basis. Additionally, when it came to platform preference, most respondents preferred the platform WhatsApp (70%), followed by Facebook (55%), Instagram (35%), and TikTok (15%). This sheds light on which platforms should be targeted for improvement.

The demographic characteristics of the sample suggest that the surveyed population is generally young, digitally connected, and educationally diverse. These features provide an ideal context for exploring how traditional beliefs and social media exposure intersect to influence pediatric healthcare decision-making.

Analysis of the Questionnaire's Items

Table 3 provides a detailed item-by-item breakdown of the respondents' attitudes and behaviors regarding pediatric healthcare decisions. The questionnaire was structured around five thematic constructs: (1) traditional health beliefs, (2) perception and use of antibiotics and vaccines, (3) influence of social media on healthcare behavior, (4) trust in pediatricians, and (5) digital health literacy and misinformation awareness. Each item was phrased clearly to reflect real-life scenarios that Jordanian parents might encounter and was assessed using a 3-point Likert scale: Agree, Disagree, and Uncertain.

Table 3. Questionnaire Item Responses

No.	Questionnaire Item	Agree (%)	Disagree (%)	Uncertain (%)
1	I trust traditional remedies more than modern medicine when my child is ill.	48	32	20
2	I believe that early use of antibiotics can prevent complications in most child illnesses.	52	25	23
3	I usually consult family or community elders before visiting a doctor.	35	45	20
4	I avoid vaccinations for my children due to concerns about side effects.	28	55	17
5	I often search for information on social media before taking my child to the doctor.	62	18	20
6	I follow health-related pages or groups on Facebook, WhatsApp, or Instagram.	58	22	20
7	I consider advice on social media just as valuable as a doctor's opinion.	43	37	20
8	I have acted on social media health advice without consulting a doctor.	55	30	15
9	I tend to delay doctor visits if I find reassuring information online.	40	40	20
10	I usually follow the pediatrician's advice regardless of what I read online.	60	20	20
12	I believe pediatricians should be more active on social media.	58	18	24
11	My pediatrician has corrected false health beliefs I had from social media.	70	12	18
13	I have encountered false or misleading health information on social media.	70	12	18
14	I can tell the difference between accurate and inaccurate online health content.	45	30	25
15	I would like to receive training or tips on how to evaluate health information online.	68	10	22

The responses revealed a nuanced interplay between cultural tradition, digital behavior, and trust in medical expertise.

The first items in the questionnaire related to preconceived notions and beliefs and how they affected parents' decisions regarding healthcare. Item 1 revealed that nearly half the participants (48%) trust traditional remedies over modern medicine. This indicated that tradition and cultural practices still influenced Jordanian pediatric healthcare decision-making. An additional 20% of the participants also expressed uncertainty regarding this item, suggesting that some relevance is still given to traditional remedies even when options are being weighed. The remaining 38% showed higher trust in medical advancement by

disagreeing with the statement thus implying a preference for modern medicine.

Item 2 indicated that traditional beliefs may influence healthcare even when medicine is involved. Over half the participants at 52% believed that antibiotics could be used to prevent the complications of most child illnesses. This implies that parents may not view prescriptions as a requirement for the use of antibiotics which could lead to their misuse for nonbacterial illnesses. Meanwhile, only 25% of the respondents disagreed with the statement despite the risks of the misuse of antibiotics.

Item 3 showed that despite not being the majority, many respondents implied higher trust in family members and community elders than in physicians by stating they would consult them before seeking professional advice. However, a higher rate (45%) indicated the opposite which carries positive implications for healthcare education and practices in Jordan.

Item 4 similarly implied a positive attitude towards proper healthcare with 55% of the participants indicating they properly keep up with vaccinations. Yet, 28% still expressed hesitations based on concerns over side effects while the remaining 17% expressed uncertainty in these regards.

Items 5-8 were concerned with the influences of social media and online content on the decisions of parents. Item 5 affirmed the dominance of the internet in the issue as most respondents (62%) confirmed that they search for child health information online. Additionally, item 6 showed that over half the participants follow health related pages on social media platforms such as WhatsApp and Facebook.

Item 7 indicated that a considerable number of participants (43%) gave equal value to online information and the opinions of doctors. This highlights the dangers of unverified information as online content is seen by many as a trustworthy resource, rivaling the reliability of experts. Moreover, item 8 further emphasized this issue as over half the participants (55%) confirmed acting upon online content without seeking advice from experts beforehand.

Items 9-12 related to how the opinions of physicians were considered and valued by parents. For instance item 9 relates to delaying doctor visits based on reactions to online content. The responses showed that an equal amount of participants would delay visits based on online information satisfaction as those who would not, at 40% each.

Item 10 suggested that most participants would place expert advice above online content as 60% of the participants stated they would follow the advice of doctors regardless of any information they see online. Item 11 relates to this notion and shows that 70% of participants have had their physicians correct false information they had encountered online. In item 12, 58% of the participants encouraged the online presence of pediatricians.

Items 13-15 related to whether parents believe they encounter misinformation online and how they perceive it. In item 13 a significant majority (70%) confirmed coming upon misinformation online while another 18% were uncertain. In item 14 45% of the participants expressed confidence in their ability to distinguish misinformation, while many others (30%) stated they did not believe they have this ability. In item 15 most participants expressed their desire to improve this ability through training and education.

In summary, the item responses collectively demonstrated that while Jordanian parents were digitally active and

culturally anchored, they remained vulnerable to online health misinformation. At the same time, their expressed desire for guidance presents a valuable opportunity for health professionals and policymakers to design responsive, culturally competent interventions.

Testing the Hypotheses

This section tested the four hypotheses proposed with the aim of investigating the relation of demographic variables, parental beliefs, social media usage, and health literacy with decision making in pediatric healthcare. These hypotheses were tested through a combination of independent samples t-tests, one-way ANOVA, and simple linear regression. The analyses focused on associations between the independent variables (e.g., gender, time spent on social media, belief systems, and media literacy) and the dependent constructs (e.g., reliance on digital health information, delay in seeking care, and trust in professional medical guidance).

Hypothesis 1

H1: Demographic factors such as gender and education significantly influence parents' decisions regarding pediatric healthcare.

To investigate whether demographic factors have a significant influence on the decisions of parents, independent samples t-tests were conducted for items representing traditional health beliefs and online behavior. Table 4 summarizes the results.

Table 4. Independent Samples T-Test for Gender-Based Differences in Beliefs and Behavior

Item	T-value	Sig. (2-tailed)
I trust traditional remedies more than modern medicine when my child is ill.	1.245	0.216
I usually consult family or community elders before visiting a doctor.	-0.985	0.327
I often search social media for information before taking my child to the doctor.	2.137	0.034*
I tend to delay doctor visits if I find reassuring information online.	1.768	0.081

* $p < 0.05$

The results confirmed the influence of gender on online health behavior in certain areas as male and female respondents showed a statistically significant difference (p = 0.034),] in their engagement with social media for pediatric health advice. The remaining items did not show statistical significance although previous analysis suggested an association between educational and a stronger belief in traditional remedies. Therefore, H1 is supported.

Hypothesis 2

H2: Increased exposure to social media content significantly influences parents' healthcare-seeking behavior, particularly in terms of delaying medical consultation and acting on non-professional advice.

To test this hypothesis, one-way ANOVA was applied to assess whether different levels of daily social media use influenced key behavioral outcomes, including trust in digital content, acting on advice without consulting a doctor, and delaying pediatric care. The results are presented in Table 5.

Table 5. One-Way ANOVA for Daily Social Media Use and Healthcare Decisions

Comparison	F-value	Sig. (p-value)
Time spent on social media vs. trust in online health content	4.891	0.009**
Time spent on social media vs. acting on online advice without consulting a doctor	5.322	0.006**
Time spent on social media vs. delay in consulting a pediatrician after reading online advice	6.211	0.004**

* $p < 0.05$; ** $p < 0.01$

The findings showed that parents with higher social media usage are more likely to trust and act on unverified health content and delay professional care. Hypothesis two was strongly supported by these findings.

Hypothesis 3

H3: Parental beliefs rooted in cultural tradition significantly correlate with susceptibility to health misinformation encountered online.

This hypothesis was tested using descriptive comparisons and t-tests. The results indicated that parents across the education spectrum were susceptible to misinformation as admissions to following unverified advice were made by parents with both high and low levels of education. Nevertheless, lower-educated respondents were more likely to trust traditional remedies and advice from elders.

While statistical significance was not observed across all demographic categories, clear trends emerged suggesting that cultural beliefs and trust in familial or anecdotal knowledge can increase vulnerability to misinformation. Therefore, H3 was partially supported.

Hypothesis 4

H4: Higher levels of digital health literacy among parents significantly reduce susceptibility to misinformation and increase reliance on professional medical advice.

A simple linear regression was conducted using the self-reported confidence in evaluating online content as the independent variable, and trust in pediatricians' guidance as the dependent variable. The results are shown in Table 6.

Table 6. Linear Regression Analysis – Media Literacy and Trust in Medical Advice

Independent Variable	Dependent Variable	Beta	T-value	Sig. (p-value)	R^2
I can tell the difference between accurate and inaccurate online health content."	I usually follow the pediatrician's advice regardless of what I read online.	0.529	4.342	0.000***	0.298

*** $p < 0.001$

The analysis confirmed that parents who are more confident in evaluating the accuracy of online information were significantly more likely to rely on professional healthcare providers ($p < 0.001$, $R^2 = 0.298$). This supports H4 and demonstrates the protective role of media literacy against misinformation in pediatric care.

In conclusion, the statistical analysis provided strong support for three of the four proposed hypotheses and partial support for the fourth. These results validated the theoretical framework of the study, emphasizing the crucial roles of cultural background, media behavior, and digital literacy in shaping pediatric healthcare decisions in Jordan.

DISCUSSION

This study builds upon and expands previous research examining the influence of traditional beliefs and social media on pediatric healthcare decisions by examining the intersection of these issues. When it came to the preference for traditional or home-based remedies, the study showed that many Jordanian parents are inclined to prioritise them when they believed the symptoms are manageable. For instance, nearly half of the respondents favored traditional over modern remedies. Around a third of the respondents also admitted to consulting elder relatives before doctors. These results parallel the observations of Panda and Panda [15], showing a global pattern where professional treatment is not seen as the default method of care. These patterns also mirror the health-seeking behaviors observed in Indian and Saudi populations [15, 17].

The paper also showed how parental concerns based on misinformation can affect Jordanians in a similar manner to Turkish parents experiencing “fever phobia”, as noted by Çelik and Güzel [16]. This manifests as worries about medication side effects and over-dependency or the misuse of medications and antibiotics without the proper prescription. These phenomena bring forth the gap between parental intuition and evidence-based healthcare.

Another issue discussed in this study that was also relevant in the previous literature was the status of social media as a source of pediatric health information. With more than half the respondents reporting consistent use of platforms such as WhatsApp and Facebook for medical advice, it is evident that social media is treated by many Jordanians as a resource, either primary or secondary, for medical information. This was similar to the patterns observed by Frey et al. [12] in Australian parents.

Nevertheless, ease of access to information does not ensure that it is correct or factual; thus, it does not guarantee improved outcomes. For example, Vilimelis-Piulats et al. [14] noted that parenting forums and health-related groups typically lack professional moderation. This results in these sites becoming echo chambers that perpetuate myths with only anecdotal experiences as sources. This current paper indicated a similar issue in the Jordanian context, as 55% of respondents admitted to acting on online advice without consulting a doctor, even when only 45% reported confidence in their ability to evaluate the credibility of that information.

This low level of digital health literacy negatively impacts health decisions and behaviors while also challenging the authority of medical professionals. For instance, as noted by Macauley et al. [13], parents challenged the accuracy of the statements of pediatricians based on unverified content they came across online. Similar attitudes were observed in this study, complicating the treatment of children as pediatricians were no longer seen as an unquestionable authority.

The study sheds light on how pediatric healthcare decisions are made in the Jordanian context. The results emphasised

that both traditional and cultural beliefs, as well as digital media, strongly influenced these decisions. The core role of beliefs in decision making implies the dangers of false beliefs, especially in critical areas such as medical care for vulnerable groups like children. As a result, digital misinformation and medically incorrect traditions can cause many hurdles for pediatric healthcare. This could involve delays in doctor visits and proper medication, the use of unproven ineffective treatments, and doubting the device of experts. This highlights the need for improved health literacy and moderation of health information resources. This can only be achieved through culturally grounded, digitally accessible public health initiatives that blend trust in tradition with a clear, evidence-based approach to pediatric care. The study showed that most respondents were willing to put in the effort to improve their skills in distinguishing medical facts from myths.

CONCLUSIONS

Pediatric healthcare decisions have long extended past the limits of the clinical environment to external influence. This study focused on the main external influences that shape pediatric healthcare decisions in Jordan. The results highlighted the importance of interventions in the digital landscape, which has become a go-to source of information. Thus, health authorities, pediatricians, and allied health professionals should actively engage with social media not only to provide accurate and accessible health information but also to counter misinformation before it takes root. Furthermore, national campaigns that promote digital health literacy, especially among populations with lower education levels or high exposure to social media, are essential to bridge the gap between medical knowledge and parental practice.

Collaborative efforts involving pediatricians, educators, media professionals, and trusted community figures can enhance the credibility and reach of such interventions. By designing training programs, online awareness content, and culturally grounded messaging, stakeholders can help reshape how parents navigate pediatric health challenges in the digital age. This requires acknowledging and addressing the socio-cultural narratives that coexist with digital influence, allowing for interventions that are not only informative but also respectful and resonant with parental experiences.

In sum, the study calls for a holistic approach that embraces both the cultural and digital dimensions of parenting in Jordan. By strategically leveraging both clinical expertise and digital communication tools, healthcare providers and policymakers can build more resilient, informed, and empowered parental communities. Only by doing so can we ensure that children's health decisions are grounded in accurate knowledge, timely intervention, and mutual trust between caregivers and the medical system.

This study had a few limitations. First, the findings were based on parents' own reports, which may not always reflect their actual behavior due to memory errors or the desire to give socially acceptable answers. Second, the study only included parents who could access and respond to an online survey, which may not represent parents from rural areas or those without internet access. Lastly, the study showed connections between beliefs and decisions but does not prove cause and effect. Future studies should include a wider range of participants

and use different methods to build on these results.

Availability of Data and Materials: The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. No public repository or web link is currently associated with the data.

Ethical Approval Statement: The research was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Ethical approval was obtained from the Institutional Review Board of The Applied Science Private University/ Jordan, under approval number FOAH 10/2023.

Informed Consent: Participants were informed about the purpose, procedures, and voluntary nature of the study prior to data collection. Written informed consent was obtained from all participants involved in the study.

Declaration of Interests: The authors declare no conflict of interest. The design, execution, analysis, and publication of this research were conducted independently of any funders or third-party interests.

Funding: This study received no external funding.

Acknowledgments: The authors extend their sincere gratitude to all the parents who generously participated in this study and shared their experiences.

REFERENCES

1. Al-Ajlouni, L., Abu-Ghazaleh, S., & Rajab, L. (2023). The Impact of COVID-19 on Pediatric Dentistry: A Study of the Knowledge and Attitudes of Parents in Jordan. *Jordan Medical Journal, 57*(4), 41–349. doi:https://doi.org/10.35516/jmj.v57i4.2069
2. Tarawneh, A., Al-Dhmour, H., Almajali, R., Sawaqed, F., Al-Dmour, A., & Mahgoub, S. (2024). Zinc and Growth with Picky Eating in a Jordan Pediatric Clinic: An Observational Study. *Jordan Medical Journal, 58*(3), 317–326. doi:https://doi.org/10.35516/jmj.v58i3.1249
3. Ghunaim, L., Agha, A. S. A., Al-Samydai, A., & Aburjai, T. (2024). The Future of Pediatric Care: AI and ML as Catalysts for Change in Genetic Syndrome Management. *Jordan Medical Journal, 58*(4), 510-528. doi:https://doi.org/10.35516/jmj.v58i4.2787
4. Masa'Deh, R. (2015). Perceived stress in parents of children with chronic disease: a comparative study. *European Scientific Journal, 11*(36).
5. Masa'Deh, R., Bawadi, H., Saifan, A., & AbuRuz, M. (2015). Perceived stress of Jordanian parents: A comparative study between mothers and fathers. *Journal of Nursing Education and Practice, 5*(11), 89-95.
6. Masa'deh, R., & Jarrah, S. (2017). Post traumatic stress disorder in parents of children with cancer in Jordan. *Archives of psychiatric nursing, 31*(1), 8-12.
7. Arabiat, D., Whitehead, L., Al Jabery, M., Hamdan-Mansour, A., Shaheen, A., & Abu Sabbah, E. (2021). Beliefs about illness and treatment decision modelling during ill-health in Arabic families. *Journal of Multidisciplinary Healthcare*, 1755-1768.
8. Kubanji, R. (2023). The Role of Religious and Traditional Beliefs on Botswana Medical Practitioners' Health Provision Behaviours: Some Highlights from a Recent Study. *Utambuzi: Journal for the Study of the Religions of Africa and its Diaspora, 6*(1), 26-39.
9. Al-Yateem, N., Lajam, A. M. A., Othman, M. M. G., Ahmed, M. A. A., Ibrahim, S., Halimi, A., . . . Rahman, S. A. (2023). The impact of cultural healthcare practices on Children's health in the

United Arab Emirates: a qualitative study of traditional remedies and implications. *Frontiers in Public Health, 11*, 1266742.

10. Yeung, A. W. K., Tosevska, A., Klager, E., Eibensteiner, F., Tsagkaris, C., Parvanov, E. D., . . . Kletecka-Pulker, M. (2022). Medical and health-related misinformation on social media: bibliometric study of the scientific literature. *Journal of medical Internet research, 24*(1), e28152.
11. Khullar, D. (2022). Social media and medical misinformation: confronting new variants of an old problem. *Jama, 328*(14), 1393-1394.
12. Frey, E., Bonfiglioli, C., & Frawley, J. (2023). Parents' use of social Media for Health Information before and after a consultation with health care professionals: Australian cross-sectional study. *JMIR Pediatrics and Parenting, 6*(1), e48012.
13. Macauley, R., Elster, N., Fanaroff, J. M., Basak, R., Geis, G. M., Laventhal, N. T., . . . Oken, R. L. (2021). Ethical considerations in pediatricians' use of social media. *Pediatrics, 147*(3).
14. Vilimelis-Piulats, I., Pérez-Ricart, A., Peligero, M. B., Calvo, A., Negre, J. M. S., & Juárez-Gimenez, J. C. (2025). Social media as a source of drug safety information in the paediatric population. *British Journal of Clinical Pharmacology*, 1-11. doi:https://doi.org/10.1111/bcp.16392
15. Panda, S., & Panda, A. (2023). Parental beliefs and practices in childhood asthma–A hospital based cross-sectional study. *Panacea Journal of Medical Sciences, 12*(1), 128-133.
16. [16]Çelik, T., & Güzel, Y. (2024). Parents' Knowledge and Management of Fever:"Parents Versus Fever!". *Turkish Archives of Pediatrics, 59*(2), 179.
17. Al-Shawi, M. M., Darwish, M. A., Wahab, M. M. A., & Al-Shamlan, N. A. (2018). Misconceptions of parents about antibiotic use in upper respiratory tract infections: A survey in primary schools of the Eastern province, KSA. *Journal of Family and Community Medicine, 25*(1), 5-12.
18. Bryan, M. A., Evans, Y., Morishita, C., Midamba, N., & Moreno, M. (2020). Parental perceptions of the internet and social media as a source of pediatric health information. *Academic pediatrics, 20*(1), 31-38.
19. Ward, L. M., Sykora, C. A., Prakash, Y., Cohen, M. B., & Levi, J. R. (2022). Parental views on the role of social media in pediatric otolaryngology. *Annals of Otology, Rhinology & Laryngology, 13*(6), 640-646.

أثر المعتقدات الأسرية والمفاهيم المغلوطة التي تروّج لها وسائل التواصل الاجتماعي في قرارات الرعاية الصحية للأطفال في الأردن

دانه العنتري[1]، أحمد حيدر[2]، إسلام الحسنات[3]، آلاء عليان[1]، عبد الله المومني[2]، دانا سكجي[1]، ياسمين عليمات[1]، ريم شعبان[1]، ميساء شاهين[1]، براء يوسف شحادة[1]، سلمى عبيدات[4]، نور قاسم بركات[5]

[1] قسم طب الأطفال، كلية الطب، الجامعة الأردنية، عمّان 11942، الأردن

[2] جامعة العلوم التطبيقية الخاصة، عمّان، الأردن

[3] مستشفى الملك عبد الله الجامعي، جامعة العلوم والتكنولوجيا الأردنية، الأردن

[4] كلية الطب، الجامعة الأردنية، عمّان 11942، الأردن

[5] قسم الطب الباطني، كلية الطب، الجامعة الأردنية، عمّان 11942، الأردن

Received: May 3, 2025

Accepted: Jun 12, 2025

DOI:

https://doi.org//10.35516jmj.v60i1.4238

الملخص

الخلفية والأهداف: تتأثر عملية اتخاذ القرارات المتعلقة بالرعاية الصحية للأطفال بمجموعة من العوامل المتداخلة، والتي غالبًا ما تكون متعارضة. وقد أدى تداخل المعتقدات الأسرية التقليدية مع الواقع الرقمي المعاصر إلى إعادة تشكيل هذه العملية، مما أسفر عن نشوء نموذج جديد يؤثر بوضوح في المجتمعات التي لا تزال ممارساتها الطبية متأثرة بالإرث الثقافي. يهدف هذا البحث إلى دراسة تأثير المعتقدات التقليدية عند بعض الأسر، بالإضافة إلى المفاهيم المغلوطة المنتشرة عبر وسائل التواصل الاجتماعي، على قرارات الرعاية الصحية المقدّمة للأطفال دون سن الثانية عشرة.

منهجية الدراسة: استند هذا البحث في جمع البيانات إلى استبيان مكوّن من 18 بندًا، وُزّع على 200 من أولياء الأمور في الأردن، بهدف قياس معتقداتهم، ومستوى وعيهم بالصحة الرقمية، ومدى تأثر سلوكهم في طلب الرعاية الصحية بالمعلومات المغلوطة المنتشرة عبر الإنترنت.

النتائج: كشفت النتائج عن تأثير واضح للمعتقدات التقليدية في قرارات الرعاية الصحية؛ إذ فضّل 48% من أولياء الأمور اللجوء إلى العلاجات التقليدية، في حين أشار 35% إلى أنهم يستشيرون كبار العائلة قبل التوجه إلى الأطباء المختصين. وفي المقابل، أفاد 62% من المشاركين بأنهم يعتمدون بشكل رئيسي على وسائل التواصل الاجتماعي للحصول على معلومات تتعلق بصحة الأطفال، فيما ذكر 55% أنهم اتبعوا نصائح صحية منشورة على الإنترنت دون الرجوع إلى استشارة طبية. أما فيما يتعلق بتمييز المعلومات، فقد أعرب 45% فقط عن ثقتهم بقدرتهم على التفريق بين المحتوى الطبي الصحيح والمضلل وأظهر اختبار الفرضيات وجود علاقة وثيقة بين انخفاض المستوى التعليمي وارتفاع معدل استخدام وسائل التواصل الاجتماعي من جهة، وبين تأخر التوجّه لطلب الرعاية الطبية والاعتماد على مصادر صحية غير موثوقة من جهة أخرى. في المقابل، بيّنت النتائج أن ارتفاع مستوى الوعي الصحي الرقمي يسهم في تعزيز الحذر لدى الأهل، ويدفعهم نحو اتخاذ قرارات صحية تتماشى بشكل أكبر مع الممارسات الطبية المعتمدة.

الاستنتاجات: توصي الدراسة بضرورة تعزيز الوجود الرقمي لأطباء الأطفال بهدف رفع مستوى مصداقية المعلومات الصحية المتداولة عبر الإنترنت. كما تدعو إلى دمج الرسائل الصحية المبنية على أدلة علمية موثوقة ضمن المنصات الرقمية واسعة الانتشار، مثل "واتساب" و"فيسبوك"، بما يسهم في الحد من تأثير المعلومات المغلوطة وتحسين نوعية القرارات الصحية المتخذة بشأن رعاية الأطفال

الكلمات الدالة: الرعاية الصحية للأطفال؛ المعتقدات الأسرية؛ وسائل التواصل الاجتماعي؛ الأردن؛ المعلومات الصحية المغلوطة؛ الصحة العامة