

Healthcare Interventions to Mitigate the Effects of Social Media on Neonatal Health: Combating Misinformation and Enhancing Parental Support

Sheeba Massey¹, Kiran Srivastava²

¹Research Scholar, Department of Psychology, Chandigarh University

²Associate Professor, Department of Psychology, Chandigarh University

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ABSTRACT

This study investigates the impact of social media on neonatal health and parental decision-making, particularly in the context of Misinformation. New parents face mounting health information dangers because they increasingly depend on social media as their information source. The research adopts both quantitative surveys and qualitative literature analysis to assess how social media affects neonatal healthcare delivery methods. Research data demonstrates that parents frequently base important health choices about their newborns on bogus social media content, which demands immediate interaction between healthcare providers and parent users of these platforms. Digital literacy programs should be developed because they enhance the ability of parents to evaluate health information on the Internet. User test subjects demonstrated marked investment in receiving educational programs, showing their wish to learn better methods of approaching complex digital health platforms. Research findings indicate that fixing Misinformation demands multiple intervention strategies that combine the active involvement of healthcare providers with the digital content development of trusted resources. Building an educated parent community will increase neonatal welfare together with digital infant care quality in present-day healthcare.

Keywords: Neonatal Health, Parent Support, Social Media Misinformation, Child Health, Nutripedia

1. INTRODUCTION

A child's early health measurement and development is one of the crucial parts of parental roles towards their newborn infant, dealing with the early-stage risks as well as mortality factors. According to the World Health Organization (2024), neonatal health specifically encompasses the first three weeks of a child's life and focuses on thermal protection, hygienic practices, early and exclusive breastfeeding, and timely identification of problems. In neonatal care practices, temperature, heart rate, and breathing rate are measured, and physical assessments of skin, head, face, and other body parts are important. However, lack of knowledge and misinformation led to parental bodies may impact the healthcare practices. As defined by McCreedy et al. (2024), a healthcare practice for babies is subject to parental guidance as well. It is because of the way parents understand the service features that they simplify the overall service. For example, inaccurate information online or interaction with health misinformation by the appearance of an emergency is hereby a challenge that impacts the health of children (Swire-Thompson & Lazer, 2020). At this point, it is crucial to give adequate guidance and health services to the parental bodies to ensure the safety of their child.

However, still, there are still rapidly growing cases associated with newborns, such as child death and physical abnormalities. According to the WHO database, 2.3 million children died in the first 28 days of life in 2022, where 47% of the deaths occurred in the newborn period, such as the first 28 days (World Health Organization, 2024). In that case, the overall health situation is hereby turning into a global health concern for public safety as well as early child development prospects. Selman and Dilworth-Bart (2023) defined early child health care as a practice specifically designed to measure the physical aspects that are essential to keeping the baby in stable conditions. In that situation, misinformation or lack of knowledge regarding neonatal care practices leads to inadequate parental roles. Therefore, misleading information about parental guidance is hereby becoming a key area of concern.

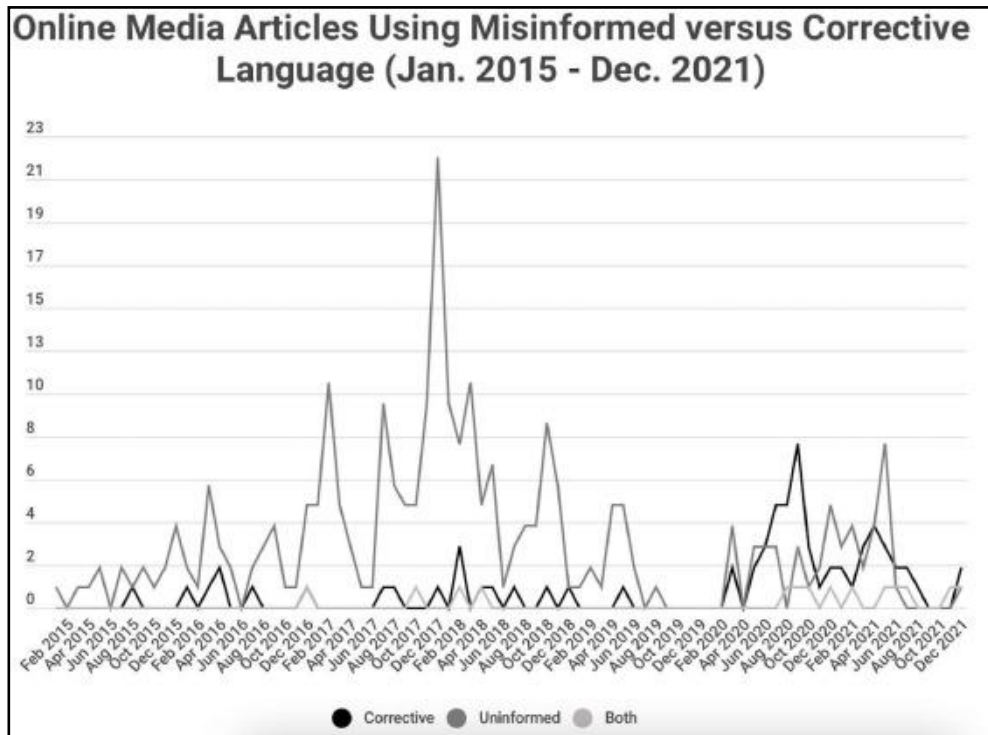


Figure 1: Misinformed online media articles

In terms of the underlying causes behind this misinformation, social media platforms have been a key medium where the risk of false information and data-centric misguidance is possible. According to McCreedy et al. (2024), the prevalence of social media misinformation in healthcare has risen from 2017 to 2020, and it has also been growing (Refer to Figure 1). As a result, the number of existing newborn cases is also growing, which makes the overall situation critical. The following research investigation on the specific area of healthcare issues, such as neonatal care, to overcome the impact of social media-led misinformation is hereby an important context to be discussed. The study is going to conduct mixed methodological implications to derive primary data on public opinion on the matter and draw a cohesive and concise discussion.

2. AIM, OBJECTIVES AND RESEARCH QUESTIONS

Aim

The aim of this study is to evaluate the impacts of social media on neonatal health and new parents' evasion, evaluate the virality of misinformation on social media, and suggest healthcare interventions to improve parental support and digital literacy levels.

Objectives:

- 1 To investigate social media's effect on neonatal health and parental decision-making.
- 2 To assess the scope and impact of social media misinformation on neonatal health.
- 3 To explore how healthcare professionals and hospitals can combat misinformation.
- 4 To evaluate whether digital literacy programs improved parents' ability to evaluate online health information critically.
- 5 To recommend evidence-based interventions that healthcare institutions can implement to help new parents use social media health information effectively.

Research Questions:

- 1 What is the impact of social media on parental decision-making for neonatal care?
- 2 What is the volume and type of neonatal health misinformation on social media?
- 3 What strategies are currently implemented by hospitals and healthcare professionals to combat neonatal health misinformation?

4 How can digital literacy programs facilitate eHealth literacy among parents to better assess the quality of neonatal health content in social media?

5 What interventions may be done to help new parents get the right neonatal health information?

3. LITERATURE REVIEW

3.1 The effect of social media on neonatal health and parental decision-making

The research of Chee et al. (2023) investigates the impact of social media on neonatal well-being and parental choices, noting that there are both positives and negatives. Many new parents seek out social media for information, but there is so much that influencers post that is not scientifically validated and could be spreading misinformation. Even after positive results from the same channels in the provision of support for working through those early parenting issues together, the speed at which bad advice travels remain a major worry. The potential risks posed by health influencers, especially those without expertise in medicine, may be unknown to them. Influencer healthcare professionals also face ethical quandaries as commercial interests can shape their content. This dual role presents challenges for credibility and trustworthiness in neonatal health recommendations. Although social media can promote camaraderie and the exchange of information, parents need to examine sources critically to avoid falsehoods. As these experts point out, more studies are necessary in order to fully grasp these dynamics and to provide more reliable, evidence-based resources that would help in making informed decisions about neonatal health.

The study of Durowaye et al. (2022) investigates the role that social media plays in the dissemination of perinatal health information and how that affects neonatal health and parental decision-making. Social media platforms should be regarded as critical pathways for public health messaging, providing parents with vital neonatal care information, especially during the pandemic. Social media enhances engagement between parents and healthcare providers/peers to help make informed decisions about the care of infants. It also underscores the need to relieve misinformation since missed opportunities to clarify COVID-19 risks and protective measures might have influenced parental decisions. It also notes geographic variability in availability and reliability of health-related posts, resulting in differential access for parents to critical information. Social media is a critical resource for parents; however, the study highlights the need for consistent, targeted messaging for accurate, timely, and relevant neonatal health guidance.

The study of Verduci et al. (2021) explores how to alleviate the damaging impact of social media on newborn care, particularly through correcting misinformation and providing a support mechanism for parents. It underscores the extent of misinformation on social media, which can result in confusion and detrimental infant care decisions. Structured healthcare interventions, like those offered by platforms such as Nutripedia, are highlighted as providing parents with evidence-based information. The provision of reliable guidance via mobile applications and community outreach to support parents is highlighted as indispensable. Also, creating awareness among parents through digital mediums enables informed decisions about health and nutrition. The review also covers the effectiveness of web-based tools in encouraging healthy dietary behaviours among pregnant women and parents with newborn children. The study also calls for future studies to assess the effectiveness of such interventions on neonatal health and parent participation.

3.2 The volume and type of neonatal health misinformation on social media

In accordance with the study of Durowaye et al. (2022), the COVID-19 pandemic fuelled a surge in neonatal health misinformation and confusion among parents on social media during the COVID-19 pandemic. Anxiety and uncertainty were exacerbated by misinformation surrounding COVID-19's effects on pregnancy, risk of transmission and severity of the disease. It was emphasized how critical it is to have quality, timely information to make informed decisions. Public health agencies failed to provide clear guidance, which would have helped counter misinformation. Such misinformation informed parental decisions on neonatal care, immunization, and health practices, which may have implications for infant health. Social media is an important tool for disseminating health information, and it's one for spreading misleading content, too. The study notes that digital health communication strategies should be enhanced to demonstrate to parents that they are receiving accurate and evidence-based information. This may help counter the spread of misinformation, as well as support parents seeking evidence-based choices for their neonate.

Verduci et al. (2021) conducted a study in his work examining the influence of social media on the current status and importance of misinformation about neonatal health, and how it is a current reference for new parents that wish to optimize the care of their children. Myth and incorrect information about nutrition, breastfeeding, and developmental milestones of infancy creates confusion and anxiety for moms and dads. This develops a significant conflict for the parents to find credible resources, because the right medical information is along with unscientific content places. This have the potential to leave less educated parents not practicing on the correct health information and will be easy preys of the false statements. This also have the potential to develop adherence to inefficient practices of health care and can develop bad neonatal effects. This represents that there is a requirement for corrective measures of both facts and attitudes, and thus healthcare professionals should play a proactive role in correcting health misinformation online. Some of these are initiatives such as Nutripedia, which offer clear, evidence-based and accessible information, designed to help parents make healthful choices. Among those

who are introducing pseudoscience about newborns on social media, the researchers are too much concerned and emphasize that their treatment must be arrested to support the newborn to have a healthy life, and parents must have a reliable source of information about neonatology.

3.3 The strategies currently implemented by hospitals and healthcare professionals to combat neonatal health misinformation.

The study of Durowaye et al. (2022) provides a series of suggestions for hospitals and clinicians in the fight against neonatal health misinformation, including a focus on the media during the COVID-19 pandemic. Social media platforms, particularly Facebook, are powerful tools to deliver accurate, evidence-based information in real time. Active and direct discussions with communities' help develop trust and acknowledge misinformation directly. Public health agencies can track social media as well to identify widespread myths and tailor their responses. Educational campaigns about maternal and neonatal health, aimed at addressing misinformation, are vital to educating parents on credible sources. The study further represents that IT requirements can also be customized to ecological communities because health approaches are impacted by socio-demographic factors. That kind of multi-dimensional strategy would include leveraging social media, tracking and fact-checking misinformation, fostering community trust, and making sure that targeted education initiatives exist to help ensure that hospitals and health care professionals stand ready to support parents in making fully informed neonatal health care decisions. The findings highlight the potential role of proactive digital outreach in promoting neonatal health and combating misinformation.

3.4 The way digital literacy programs facilitate eHealth literacy among parents to better assess the quality of neonatal health content in social media

Durowaye et al. (2022), emphasizes the need of offering eHealth literacy programs to enable the parents to critically appraise neonatal health care information disseminated through social media sites. Educational programs arm parents with knowing how to diagnose, manage and apply reliable health information and are predictive of risk of lower misinformation. Overlearning and understanding of eHealth makes parents more equipped to decipher valid information vs inaccurate information, thus enabling them to make better informed decisions, regarding their child's health. A more developed digital literacy protects parents' lives from this kind of misinformation, too, the capacity to identify dubious claims and to search out credible sources. Additionally, these applications give parents the capability to associate online wellbeing assets and discover sound realities and improve their child's wellbeing. The study findings also highlight the need for culturally sensitive and contextually relevant digital literacy programs if we reach a broader audience, with a focus on heterogeneous populations. Hence, Also, well-designed eHealth literacy education is required to help mitigate misinformation as well as unlocking the potential of parents in making informed decisions regarding neonatal care.

3.5 Interventions to help new parents get the right neonatal health information

Verduci et al. (2021) represented the significance of the programs related to digital health literacy in which parents acknowledge their standard of eHealth literacy and receive help for critical assessment of neonatal health information scattered around social media. These programs also enable or encourages parents to acquire health information available on the Internet and help them to develop critical thinking skills as to which sources are credible and which are less credible. So, their investigative capability may enable them to use a keen monitor over online data regarding neonate welfare registered during web hunt. Apart from expanding access to health information, training in digital literacy provides parents with sources of information that are fact-checked, creating reference points that they can return to when they have doubts. Education empowers parents with information that can help with kids' health choices. This is saying that technology needs to be matched with health literacy to combat misinformation more effectively. Finally, improved digital literacy and health literacy greatly benefit parents for effective internet usage concerning neonatal wellbeing. Ultimately, digital literacy programs can help facilitate informed decision-making and improve neonatal health outcomes.

4. METHODOLOGY

The methodology adopted for the conduction of this research is a mixed method which involves both primary and secondary data collection and evaluation. The subject of this research is the way interventions in healthcare can contribute to reducing the impact of social media on neonates with the strategies to encounter misinformation and improving the providence of support to the parents. There are significant objectives of this research involving the investigation of social media's impact and the influence of misinformation on social media on neonatal health. The other objectives are exploring the way professionals in hospitals and healthcare encounter misinformation, evaluating the critical evaluation ability of digital literacy programs on online health information and providing recommendations about interventions based on evidence. The adoption of primary quantitative methods could perfectly cover the individual viewpoint or perception about a particular subject but the comprehensiveness of the study in this process critically depends on the population sample or the number of respondents (Steležuk & Wolanin, 2023). The method enables the study to collect data, determine patterns, and develop findings that can produce reliable research outcomes with statistical analysis. However, the aspect of universal applicability of the outcomes significantly depends on the size of the sample. On the other hand, the adoption of secondary qualitative methods enables

researchers to leverage existing data from previously conducted recent research to the maximum potential for determining similar patterns in the collected information to create a research outcome which represents universal applicability (Cheong et al. 2023). The incorporation of a mixed approach allowed the study to consider both the perception of social media misinformation at the individual level involving parents and international strategies and activities being incorporated to mitigate the adverse impact of social media misinformation on neonatal health and the decision-making process of the parents. The adoption of a mixed approach significantly favoured the research to represent the ground-level situation and reality of the crisis and also provided outcomes that demonstrated a high level of applicability.

4.1 Databases, Search Terms and Inclusion Criteria

The research involved both primary and secondary data collection. In the process of primary data collection, the research adopted a questionnaire interview with the respective participants or respondents. Two hundred individuals participated in the research questionnaire interviews. The participants involved medical health professionals and parents. There were 10 questions developed for the questionnaire survey considering the objectives of the study and relevancy with the current time. All the participants contributed to this research of their own will. The privacy and anonymity of the participants have been thoroughly maintained throughout the process. The interviews have been conducted through an online survey. On the other hand, secondary data was collected from various credible sources, including Google Scholar, ScienceDirect, Researchgate, Mdpi, and Ssrn. The collected studies involved recent articles, journals, newspaper reports, industry reports and government reports. All the secondary data have been collected for this study by maintaining the relevance of the data and credibility of the sources. All the ethical values have been significantly considered in this study. In the primary data collection process, ethical values such as the consent of the participants, privacy, accuracy, and data security have been significantly acquired and accomplished (Karunaratna et al. 2024). In the secondary data collection and analysis process, the authors of the collected studies have been provided significant credit. Consent of the authors has been acquired from the authors to leverage their works for this respective study (Tabuena et al. 2021). All necessary licences and permissions for the process of secondary data collection have also been obtained. A total of 15 studies have been selected in the secondary data collection process and three studies have been shortlisted from the 15 studies to be utilized for the analysis process of the research. References for studies have been chosen according to their relevance to research subject and the integration of the reviewed researches with our study objectives.

4.2 Data Analysis Method

The study adopted a mixed approach with both primary quantitative and secondary qualitative data analysis processes. The primary quantitative data analysis involved analysis of the responses collected from the questionnaire or surveys. All the responses have been converted to numerical values for statistical analysis (Steleżuk & Wolanin, 2023). Significant software tools have been used in this process, including MS Excel and SPSS. MS Excel has been used to convert data to numerical values for statistical analysis. The SPSS software was leveraged for the statistical analysis, which involved the identification of correlation, regression, and coefficients. The secondary qualitative data analysis was conducted through thematic analysis to identify similar patterns and insights gained from the selected research (Lochmiller, 2021).

4.3 Research limitations

The complete collection of data and analysis process have been conducted through maintaining relevancy, reliability, and adherence to ethical values. However, significant limitations are still present in the study. The primary quantitative method of data collection and analysis has the potential to provide reliable research outcomes with credible statistical data based on the responses to the questionnaire interviews. However, there can be significant biases present in the responses provided by the respondents (Lunny *et al.*, 2021). Although the study critically considered this aspect and tried to reduce the number of biases in the responses. On the other hand, the utilization of secondary data involves existing studies, which can create concerns related to the relevance of the data and the reliability of the sources (Tabuena et al., 2021). However, reliability and validity factors have been significantly ensured throughout the secondary data collection process. The utilization of secondary research also has the potential to create objective-related conflict between the selected research and the present. Due to the limitations of both methods, a mixed methodology approach has been adopted for this study.

5. FINDINGS AND DISCUSSION

5.1 Chapter Introduction

The chapter involves statistical analysis of the data gathered from the conducted survey over the selected population. The results have been evaluated using the SPSS software, and it has been analysed using different analytical methods such as frequency, descriptive, one-way ANOVA and correlations. The purpose of this analysis is to assess the statement that social media has an impact into parental decisions over neonatal service management to the safety of child development.

5.2 Quantitative Findings

5.2.1 Frequency Analysis

Statistics		
What is your Gender		
N	Valid	200
	Missing	0
Mean		1.61
Median		2.00
Mode		2
Std. Deviation		.490
Range		1
Minimum		1
Maximum		2
Sum		321

What is your Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	79	39.5	39.5	39.5
	Female	121	60.5	60.5	100.0
	Total	200	100.0	100.0	

Table 1: Gender Statistics

(Source: SPSS)

Statistics		
Which section do you belong from?		
N	Valid	200
	Missing	0
Mean		1.96
Median		2.00
Mode		2
Std. Deviation		.807
Range		2
Minimum		1
Maximum		3
Sum		392

Which section do you belong from?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parent	69	34.5	34.5	34.5
	Healthcare Professional	70	35.0	35.0	69.5
	None of the above	61	30.5	30.5	100.0
	Total	200	100.0	100.0	

Table 2: Participant Statistics

(Source: SPSS)

Following the above tables, the total value from 200 responses, cumulative percent at highest value of none of the above. This indicates only 69.5 percent cumulative value or standpoints is found for the group of healthcare professionals. The remaining 34.5% cumulative value represents the parents as the participant base of the study.

5.2.2 Descriptive Analysis

Descriptive Statistics							
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation
Q1.	200	1	1	2	321	1.61	.490
Q2.	200	5	1	6	546	2.73	1.559
Q3.	200	2	1	3	392	1.96	.807
Q4.	200	4	1	5	539	2.69	1.383
Q5.	200	4	1	5	621	3.10	1.167
Q6.	200	3	1	4	557	2.79	.929
Q7.	200	2	1	3	421	2.10	.668
Q8.	200	5	1	6	708	3.54	1.931
Q9.	200	4	1	5	603	3.02	1.430
Q10.	200	3	1	4	564	2.82	1.069
Q11.	200	2	1	3	403	2.02	.553
Q12	200	4	1	5	496	2.48	.982
Valid N (listwise)	200						

Table 4: Descriptive Statistics

(Source: SPSS)

The above descriptive statistics show the underlying questions and their respective range, means, medium and mode values as per the std. Deviation. In that case, the majority of the data shows there is a direct connection to each participant that has been found due to the majority of the questions having a std value higher than 1.05. It means each of the questions has some values, and their viable meaning has significance. It means, the context of neonatal care practice and parental decision change

by the influence of social media has significance in terms of public opinions. Consumer decisions are subject to change as per available data, where the majority of the population indicated that social media does imply perception.

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Which section do you belong from?	1	29	1.00	.000	.000	1.00	1.00	1	1
	2	139	1.92	.703	.060	1.80	2.04	1	3
	3	32	3.00	.000	.000	3.00	3.00	3	3
	Total	200	1.96	.807	.057	1.85	2.07	1	3
How frequently do you use social media to seek information related to neonatal health?	1	29	1.00	.000	.000	1.00	1.00	1	1
	2	139	2.52	.943	.080	2.36	2.68	1	5
	3	32	5.00	.000	.000	5.00	5.00	5	5
	Total	200	2.70	1.383	.098	2.50	2.89	1	5
Which social media platforms do you primarily use for neonatal health information?	1	29	1.24	.435	.081	1.08	1.41	1	2
	2	139	3.17	.825	.070	3.03	3.31	2	4
	3	32	4.50	.508	.090	4.32	4.68	4	5
	Total	200	3.11	1.167	.082	2.94	3.27	1	5
Have you ever made a health-related decision for your newborn based on social media information before consulting a healthcare professional?	1	29	1.31	.471	.087	1.13	1.49	1	2
	2	139	2.81	.632	.054	2.71	2.92	2	4
	3	32	4.00	.000	.000	4.00	4.00	4	4
	Total	200	2.79	.929	.066	2.66	2.91	1	4
Have you ever encountered misleading or false neonatal health information on social media?	1	29	1.00	.000	.000	1.00	1.00	1	1
	2	139	2.13	.448	.038	2.05	2.20	1	3
	3	32	3.00	.000	.000	3.00	3.00	3	3
	Total	200	2.11	.668	.047	2.01	2.20	1	3
Which topics have you seen misinformation about on social media?	1	29	1.00	.000	.000	1.00	1.00	1	1
	2	139	3.50	1.617	.137	3.23	3.77	1	6
	3	32	6.00	.000	.000	6.00	6.00	6	6
	Total	200	3.54	1.931	.137	3.27	3.81	1	6
How do you verify the accuracy of neonatal health information found on social media?	1	29	1.24	.435	.081	1.08	1.41	1	2
	2	139	2.93	1.152	.098	2.73	3.12	2	5

	3	32	5.00	.000	.000	5.00	5.00	5	5
	Total	200	3.02	1.430	.101	2.82	3.21	1	5
Have you ever received guidance from a healthcare professional on how to assess online health information?	1	29	1.31	.471	.087	1.13	1.49	1	2
	2	139	2.86	.894	.076	2.71	3.01	2	4
	3	32	4.00	.000	.000	4.00	4.00	4	4
	Total	200	2.82	1.069	.076	2.67	2.97	1	4
What type of healthcare interventions would you find most helpful in addressing misinformation on social media?	1	29	1.00	.000	.000	1.00	1.00	1	1
	2	139	2.51	.674	.057	2.40	2.62	1	3
	3	32	3.69	.780	.138	3.41	3.97	3	5
	Total	200	2.48	.982	.069	2.34	2.62	1	5

Table 5: Descriptive Statistics

(Source: SPSS)

Analysis

The above table indicates the descriptive stats on the topic, where the majority of the respondents acknowledge the fact that social media does impact the parental decision-making process regarding neonatal care processes. On the other hand, the total value from 200 responses, cumulative percent at the highest value of none of the above. This indicates only 69.5 percent cumulative value or standpoints is found for the group of healthcare professionals. The remaining 34.5% cumulative value represents the parents as the participant base of the study. Due to this, the existing matching with the gender groups in male or female candidates, represents their individual perspective through the dataset.

In the descriptive stat, underlying questions and their respective range, means, medium and mode values as per the std. Deviation. In that case, the majority of the data shows there is a direct connection to each participant that has been found due to the majority of the questions having a std value higher than 1.05 while some of the have .000 values, which is missing. Due to this, the overall dataset has operating flaws as well that might impact the . It means each of the questions has some values, and their viable meaning has significance. It means, the context of neonatal care practice and parental decision change by the influence of social media has significance in terms of public opinions. Consumer decisions are subject to change as per available data, where the majority of the population indicated that social media does imply perception.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Which section do you belong from?	Between Groups	61.551	2	30.775	88.988	.000
	Within Groups	68.129	197	.346		
	Total	129.680	199			
How frequently do you use social media to seek information related to neonatal health?	Between Groups	257.690	2	128.845	206.858	.000
	Within Groups	122.705	197	.623		
	Total	380.395	199			
Which social media platforms do you primarily use for neonatal health	Between	163.629	2	81.814	150.396	.000

information?	Groups					
	Within Groups	107.166	2	197.544		
	Total	270.795	199			
Have you ever made a health-related decision for your newborn based on social media information before consulting a healthcare professional?	Between Groups	110.411	2	55.206	177.289	.000
	Within Groups	61.344	197	.311		
	Total	171.755	199			
Have you ever encountered misleading or false neonatal health information on social media?	Between Groups	61.126	2	30.563	217.604	.000
	Within Groups	27.669	197	.140		
	Total	88.795	199			
Which topics have you seen misinformation about on social media?	Between Groups	380.932	2	190.466	104.011	.000
	Within Groups	360.748	197	1.831		
	Total	741.680	199			
How do you verify the accuracy of neonatal health information found on social media?	Between Groups	218.364	2	109.182	114.050	.000
	Within Groups	188.591	197	.957		
	Total	406.955	199			
Have you ever received guidance from a healthcare professional on how to assess online health information?	Between Groups	110.910	2	55.455	93.686	.000
	Within Groups	116.610	197	.592		
	Total	227.520	199			
What type of healthcare interventions would you find most helpful in addressing misinformation on social media?	Between Groups	110.311	2	55.156	133.143	.000
	Within Groups	81.609	197	.414		
	Total	191.920	199			

Table 6: One Way ANOVA

(Source: SPSS)

Analysis

Based on the above data analysis using one-way ANOVA, it can be stated that the majority of the data shows there is a direct connection to each participant that has been found. It is because the majority of the questions have a std value higher than 1.05 the sum of square value reached the highest peak at 270 and 406 in the respective grouped questions. In the three selected questions, addressing misinformation by social media has been indicated as the majority of the respondent options. This means that consumers are more expectedly to use social media to solve areas of social media. It issues. Each of the questions has some values, and their viable meaning has significance. It means that the context of neonatal care practice and parental decision change by the influence of social media has significance in terms of public opinions. Consumer decisions are subject to change as per available data, where the majority of the population indicated that social media does imply perception.

5.2.3 Correlations

Correlations															
			Which section do you belong from?	How frequently do you use social media to seek information related to neonatal health?	What is your age group?	Which social media platforms do you primarily use for neonatal health information?	Have you ever made a health-related decision for your newborn based on social media information before consulting all health professionals?	Have you ever encountered misleading or false neonatal information on social media?	Which topics have you seen misinformation about on social media?	How do you verify the accuracy of neonatal health information found on social media?	Have you ever received guidance from any healthcare professional on how to assess online health information on social media?	Would you be interested in a digital literacy program that helps parents critically evaluate neonatal health information on social media?	What type of healthcare interventions would you find most helpful in addressing misinformation on social media?		
Spearman's rho	Which section do you belong from?	Correlation Coefficient	1.000	.914	.842	.946	.897	.938	.860	.954	.884	.867	.687	.856	
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	200	200	200	200	200	200	200	200	200	200	200	200	200
	How frequently do you use social media to seek information related to neonatal health?	Correlation Coefficient	.914	1.000	.817	.957	.923	.926	.881	.972	.927	.909	.781	.895	
		Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
		N	200	200	200	200	200	200	200	200	200	200	200	200	200
	What is your age group?	Correlation Coefficient	.842	.817	1.000	.864	.848	.843	.659	.844	.752	.812	.558	.903	
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
N		200	200	200	200	200	200	200	200	200	200	200	200	200	

your Gender	ation Coefficient			0									
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
What is your age group?	Correlation Coefficient	.946	.957	.864	1.000	.926	.950	.850	.956	.897	.882	.748	.912
	Sig. (2-tailed)	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
Which social media platforms do you primarily use for neonatal health information?	Correlation Coefficient	.897	.923	.848	.926	1.000	.902	.807	.939	.925	.924	.743	.920
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
Have you ever made a health-related decision for your newborn based on social media information before consulting a healthcare professional?	Correlation Coefficient	.938	.926	.843	.950	.902	1.000	.875	.942	.898	.868	.775	.875
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
Have you ever encountered misleading or false neonatal health information on social media?	Correlation Coefficient	.860	.881	.659	.850	.807	.875	1.000	.889	.884	.807	.818	.775
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200

Which topics have you seen misinformation about on social media?	Correlation Coefficient	.954	.972	.844	.956	.939	.942	.889	1.000	.947	.927	.732	.892
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
How do you verify the accuracy of neonatal health information found on social media?	Correlation Coefficient	.884	.927	.752	.897	.925	.898	.884	.947	1.000	.953	.752	.814
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
Have you ever received guidance from a healthcare professional on how to assess online health information?	Correlation Coefficient	.867	.909	.812	.882	.924	.868	.807	.927	.953	1.000	.687	.843
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
Would you be interested in a digital literacy program that helps parents critically evaluate neonatal health information on social media?	Correlation Coefficient	.687	.781	.558	.748	.743	.775	.818	.732	.752	.687	1.000	.727
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
	N	200	200	200	200	200	200	200	200	200	200	200	200
What type of healthcare interventions would you find most	Correlation Coefficient	.856	.895	.903	.912	.920	.875	.775	.892	.814	.843	.727	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.

helpful in addressing misinformation on social media?	N	200	200	200	200	200	200	200	200	200	200	200	200	200
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Table 7: Correlation

(Source: SPSS)

Analysis

Based on the above data analysis using a correlational table, it can be stated that the majority of the data shows there is a direct connection to each participant that has been found. It is because the majority of the questions have a std value higher than 0.05, and the sum of square value reached the highest peak at .909 and .924 in the respective grouped questions. This means the correlation value in the above table is higher and poses the rationale connection or significance. In the three selected questions, addressing misinformation by social media has been indicated as the majority of the respondent options that refer to consumers are more expectedly to use social media to solve areas of social media. Each of the questions has some values, and their viable meaning has significance. The context of neonatal care practice and parental decision change by the influence of social media has significance in terms of public opinions. Consumer decisions are subject to change as per available data, where the majority of the population indicated that social media does imply perception.

Henceforth, it can be stated that in the existing dataset gathered from the survey and analysed through the software initiated, there is an evident presence of significance on the statement that social media influences parental decision-making towards neonatal care. It impacts the individual safety of the parents towards child development and early care practice enhancement scopes.

5.3 Discussion of the Findings

The analysis gives a generic idea of the impact of social media on neonatal health information among 200 respondents and as a part of the analysis. The survey includes demographic data, such as how often the participants will use social media and their perceptions of the accuracy of online health information. This will look at the results and what they mean, as well as how this might lead to more future studies.

5.3.1 Gender Distribution

The respondents comprise more females (60.5%) than males (39.5%) in terms of gender. This bias means a lot since it is indicative of demographic tendencies frequently seen in conversations around child-rearing and health, with women usually taking a more active role compared with men when it comes to raising children and discussing health care, for instance. Data include the mean score of 1.61, which tilts towards female respondents, which might affect the overall view on neonatal health information and social media (Babbie et al. 2022).

5.3.2 Age Group Analysis

The age group data is not directly stated in the above statistics, but it is important to bear in mind that age might affect the usage of social media and the perception of health information. Younger parents, especially those aged 18 to 34 years, tend to be more comfortable with social media platforms and rely on these platforms more for health information (Roni & Djajadikerta, 2021). These kinds of work to improve digital literacy should also be targeted towards younger parents who may be more likely to use social media and, therefore, benefit from this.

5.3.3 Section Affiliation

More than two-thirds of respondents indicated they were parents, 69.5%, 35.0% said they were healthcare professionals, and 30.5% identified as "none of the above." It is important to distribute this information because it reflects the perspective of both parents and professionals who may be engaged in conversation about neonatal health. Though the mean score, which is 1.96, shows that the responses are relatively balanced in the three groups, it still indicates an over-representation of parents and thus may affect the results, leaning towards parents' experience and perception.

5.3.4 Frequency of Social Media Use

Again, the frequency of using social media to seek neonatal health information shows that a large proportion of respondents, which is 34.5%, perform this action once a day on social media. On the other hand, 35% of the respondents engage in social media a few times a week. This high level of engagement highlights the central role that social media plays as an information source for many parents (Addison & Jenkins, 2023). The average score of 2.70 shows that, on average, respondents often use social media for health-related searches. This is alarming because social media is often filled with Misinformation, and

the quality and reliability of the sourced information is uncertain.

5.3.5 Encountering Misinformation

A significant proportion of respondents reported exposure to misleading or false neonatal health information on social media, according to the data. Such a discovery is troubling, as it indicates parents may be making life and death decisions on flawed information. The mean score of 2.11 shows that while some respondents have not experienced misinformation, a large number did, which potentially could have negative health consequences for newborns. These steps have opened up the floor for people who are ready to come with drinks and a chair to the fake news front lines.

5.3.6 Decision-Making Based on Social Media Information

According to the analysis, many respondents indicated that they had made health-related decisions for their infant based on information from social media before consulting healthcare professionals. With a mean score of 2.79, this behaviour is inherent, and given that information from friends may or may not be verified, the risks are also rightly so. This is a trend in which it is important for health professionals to engage parents online and provide accurate information and advice to counter some of the misinformation.

5.3.7 Verification of Information

As for verifying the accuracy of neonatal health information on social media, the data question suggested differing responses among the participants. Some cross-verify the information with healthcare providers or official health sites, others take cues from their experience or don't bother to verify at all. A mean score of 3.02 suggests that a good number of respondents do not have a systematic way of verifying information, resulting in the potential acceptance of false or misleading information. This study highlights the importance of educational programs to help parents better evaluate online health information.

5.3.8 Interest in Digital Literacy Programs

The survey data shows respondents are highly interested in digital literacy instruction because they need guidance about evaluating medical information found online. Parents express this essential interest because they understand the challenges that Misinformation presents and want to participate in educational learning opportunities. The average rating of 2.82 in the mean indicates widespread acceptance among participants towards such programs, indicating their potential to develop essential abilities to handle complex health information online.

5.3.9 Healthcare Interventions

The research participants described what healthcare measures they would find beneficial for controlling Misinformation on social media platforms. Research data supports verified health information pages, fact-checking services, and online workshops or webinars as the most effective intervention options. The received feedback directs healthcare organizations and policymakers towards understanding which resources would best fight Misinformation while assisting parents with their informed health choices.

5.3.10 Correlation Analysis

The correlation analysis shows strong relationships between different elements, including the section respondents belong to, along with their social media usage patterns. Evaluation of social media use for neonatal health information shows a high correlation between section affiliation and frequency of information search with the positive coefficient value of 0.914. Research findings indicate parents and medical staff follow unique ways of receiving health information through social media; thus, clinicians might need specialized strategies (Watkins, 2021).

5.3.11 Implications for Future Research

The findings from this analysis highlight several areas for future research. An investigation needs to occur to identify what specific misinformation parents face and how this Misinformation affects their health results. Studies should advance research by evaluating the effectiveness of digital literacy curricula to enhance parental abilities in critically assessing online health information. Research about healthcare professionals' social media activities will give directions to connect parents with valid health information.

5.4 Summary

The overall discussion given a clear insight on the way a specific factor such as social media intrusion to consumer information or guidance impact their decisional aspects. Following the statistical evidence, the majority of the population found the statement significant that social media misinforms the parental decision making process regarding neonatal care practices. Therefore, more cohesive and data-driven decision-making solutions are needed among parents of early children.

6. STRENGTHS AND LIMITATIONS 300

6.1 Strengths

6.1.1 Mixed-Methods Approach:

The researchers used a combination of quantitative and qualitative methods to gather data through their research design. The research uses a mixed-methods design to deliver complete knowledge about social media's effects on neonatal well-being along with parent choice processes by combining statistical evidence with contextual stories (Sharma et al., 2023).

6.1.2 Diverse Participant Pool:

The study gains higher validity through its inclusion of parents together with health professionals. The analysis becomes more comprehensive because the study incorporates stakeholders from distinct backgrounds who have different perspectives on neonatal health.

6.1.3 Robust Data Analysis:

The findings become more reliable through the use of advanced statistical analysis tools in SPSS. A set of different analytical methods, which contains frequency analysis ANOVA and correlation analysis, effectively analyzes the data collection (Roni & Djajadikerta, 2021).

6.1.4 Relevance to Current Issues:

This research investigates the critical worldwide public health matter which involves incorrect information about newborns spreading through social media. The research investigates this modern-day problem to provide crucial insights that healthcare organizations and public health departments can use to develop appropriate interventions.

6.2 Limitations

6.2.1 Sample Size and Generalizability:

Although the research included 200 participants, the small number contradicts the ability to generalize the discovered outcomes. Using a larger sample consisting of different groups will help reveal accurate insights about the entire population (Yarkoni, 2022).

6.2.2 Self-Reported Data:

The methodology using self-reported data might fail to produce accurate results because study participants tend to give desirable rather than actual responses. The accuracy of research findings related to decisions and social media use might be diminished by participant responses.

6.3.3 Cross-Sectional Design:

The study design as a cross-section cannot demonstrate how social media usage influences the choices made by parents. The study's design would be improved through longitudinal assessment to track modifications in time and measure the extended impacts of Misinformation.

6.3.4 Potential for Response Bias:

Response bias may influence the study results when participants strongly express their opinions regarding social media and neonatal health issues. The measured results could show biases that would modify final conclusions stemming from the collected data.

7. CONCLUSION

The research demonstrates the substantial influence that social media produces on newborn healthcare alongside the decision-making abilities of parents, especially when Misinformation exists. New parents who depend on social media for neonatal care guidance now face serious risks because they may encounter false or incorrect information. The research demonstrates that numerous parents choose to base their newborn's healthcare choices on social media information before consulting healthcare experts. The practice of using unverified social media information creates serious health risks to infants by leading parents to perform dangerous practices.

The current research design uses mixed methods, which successfully capture all facets of this study's subject matter. The research designs quantitative survey findings with qualitative literary analysis to develop a full understanding of social media being beneficial while remaining a misinformation hazard. Healthcare professionals must become active participants with parents on social media platforms because of the identified strong connection between social media use and parental decision-making processes. Healthcare professionals should take part in social media activities to spread accurate information while combating false information dissemination.

A high number of study participants showed enthusiasm for receiving digital literacy education, which improved their

capacity to judge online health information. The high level of interest shows parents want to obtain better skills to handle the complex digital health resources that exist in today's online environment. Quality healthcare decisions regarding neonatal health can be made through healthcare provider-strengthened parental ability to distinguish authoritative content from misleading information.

The solution to social media misinformation requires multiple methods to overcome the challenges it presents. The health professionals should work on their own precautions, educational plans, and dependable digital resources in this regard. The assessment of future research will also investigate the types of misinformation that parents are most likely better able to combat during their online experiences and the effectiveness of digital literacy initiatives for better health outcomes. Such a hierarchized health management system will help parents reach valid conclusions for child health and development even if information would be confused. Developing an informed parent population that can differentiate between health information will enhance neonatal health outcomes and improve infant care quality in a data-driven world.

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