

Impact Of Excessive Online Health Searches On Parental Well-Being

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Abstract - *Technology transformed how parents access health information, but excessive online searches, termed cyberchondria, can fuel compulsive reassurance-seeking and anxiety when managing family health concerns. Demographic factors such as age, education, socioeconomic status, and family structure shape vulnerability to such behaviors, yet their interplay with cultural norms remains understudied in Filipino contexts. This study aimed to determine the impact of cyberchondria on parental well-being, focusing on domains such as compulsion, distress, excessiveness, reassurance-seeking, and mistrust, as well as thoughts, feelings, and behaviors. It analyzed how sociodemographic factors affected cyberchondria and parental well-being and explored the relationship between the two. Using a quantitative correlational research design, 400 parents from 10 barangays in Baguio City were selected through systematic random sampling. Data were collected using the Cyberchondria Severity Scale-15 and the Health Anxiety by Proxy Scale (HAPYS) and analyzed using descriptive and inferential statistics. Results showed severe effects of Excessiveness and Reassurance-seeking, with high anxiety levels in thoughts and behaviors. Significant differences were found between age and cyberchondria, and between monthly income and health anxiety. A moderate positive correlation indicated that higher cyberchondria is linked to increased health anxiety by proxy, reflecting poorer parental well-being. The study concludes that cyberchondria diminishes parental well-being by fueling anxiety, reassurance-seeking, and reduced resilience, and recommends interventions such as vetted health portals, digital health literacy modules, mindfulness circles, and culturally adapted tools to transform digital dependence into responsible health-seeking behavior.*

Keywords: Cyberchondria, Parental well-being, Health anxiety, Parents

I. INTRODUCTION

The wide use of the internet and digital technologies has fundamentally altered how parents seek and appraise health information. According to the World Health Organization (2021), the internet offers immediate access not only to expert-curated repositories (e.g., WebMD, Mayo Clinic, PubMed, CDC) but also to unregulated blogs, forums, and social media feeds. The overwhelming volume of sensationalized yet contradictory health information often precipitates cyberchondria, an excessive pattern of online health searching characterized by prolonged or repeated sessions (Anderson & Perrin, 2021; Starcevic & Berle, 2021). Globally, studies have found that 80% of internet users seek health information, with parents among the most active (White & Horitz, 2020), often using it to support decision-making and communication with healthcare providers (Rains & Turner, 2021). Despite its advantages, cyberchondria has been associated with heightened anxiety, misinformation, self-diagnosis, and delays in professional consultation (McMullan et al., 2019; Baumgartner & Hartmann, 2020).

In the Philippine context, over 73 million Filipinos were registered internet users in 2021, with many parents turning online for healthcare details (Statista, 2021). Unlike in Western contexts, searching behaviors of Filipino parents are shaped by sociocultural values such as *hiya* (a sense of shame) and *pakikisama* (maintaining social harmony), which can deter open discussions with healthcare professionals and reinforce reliance on online sources. This cultural dimension of cyberchondria remains underexplored in global literature. Moreover, little is known about how sociodemographic backgrounds of Filipino parents (e.g., age, education, socioeconomic status, family structure) influence both their online health behaviors and their psychosocial well-being. This gap constrains the ability of healthcare professionals to design culturally sensitive interventions that address not only digital health literacy but also family-centered care.

By situating cyberchondria within the Filipino sociocultural milieu, this study moves beyond confirming established global associations between online health searches and anxiety. It demonstrates how cultural values interact with sociodemographic factors to shape patterns of cyberchondria, influencing parental well-being and family health outcomes. The findings aim to inform nursing practice by guiding the development of context-specific strategies and care plans that promote balanced, informed decision-making, reduce health-related anxiety, and strengthen family health. Specifically, the study examines the impact of cyberchondria across compulsion, distress, excessiveness, reassurance-seeking, and mistrust, while exploring how these dimensions are mediated by sociodemographic and cultural variables unique to Filipino parents.

II. LITERATURE REVIEW

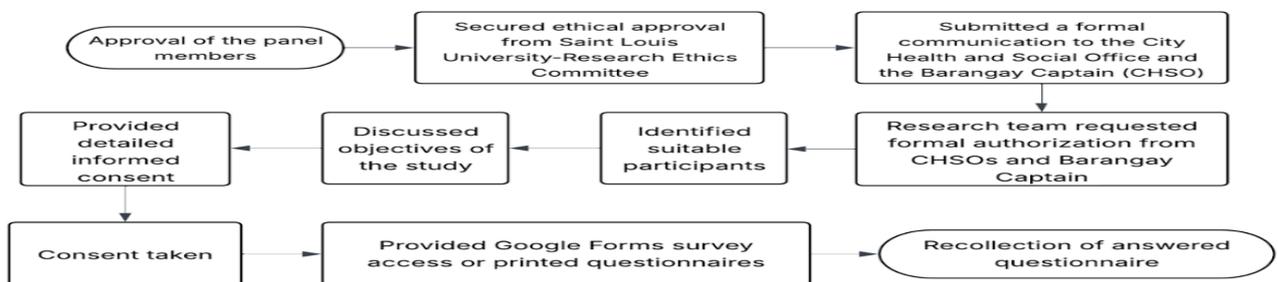
Cyberchondria, or excessive online health information seeking, has been linked to higher anxiety and poorer well-being. Prior studies show that while searching can improve knowledge, it often leads to information overload, reduced confidence, and avoidance of professional care (Glatz & Lippold, 2023; Moon et al., 2019; Starcevic & Berle, 2021). However, most research has focused on general adults rather than parents, leaving a gap in understanding its impact on parental well-being. This study addresses that gap by examining how excessive searching affects emotions, stress, decision-making, and resilience of Filipino parents within their cultural and healthcare context.

III. MATERIALS AND METHODS

This section outlines the systematic approach employed to examine the relationship between cyberchondria and parental well-being among Filipino parents in Baguio City:

1. **Research Design:** This study utilized a quantitative correlational design to examine the relationship between cyberchondria and parental well-being among Filipino parents in Baguio City. This design allowed the identification of patterns between health-seeking behaviors and parental well-being.
- **Participants/Data Sources:** A total of 400 Filipino parents were recruited through systematic random sampling across ten barangays in Baguio City. Selection followed a draw-lot method at the district level, and every third household was invited to participate. Eligible participants were biological parents with at least one child who engaged in frequent online health searches (≥ 30 minutes or ≥ 3 times daily). Those with diagnosed mental health conditions, healthcare professionals, and barangay officials were excluded. The sample had a mean age of 42.2 years, with women comprising 76%. Most were married, had an average of 2–3 children, and varied in educational attainment, employment, and household income.
1. **Tools and Instruments:** Data were collected using both Google Forms and paper-based questionnaires. Two standardized tools were used: the Cyberchondria Search Scale (CSS-15), assessing compulsion, distress, excessiveness, reassurance-seeking, and mistrust of medical professionals ($\alpha = 0.89-0.95$); and the Health Anxiety by Proxy Scale (HAPYS), measuring thoughts, feelings, behaviors, and impact of parental health anxiety ($\alpha = 0.95$). Both tools underwent face validity and readability testing, confirming appropriateness for the target population.
2. **Procedures:**

Figure 1. Data Gathering Procedure



3. **Analysis Techniques:** Demographic profiles were summarized using descriptive statistics (means and percentages). CSS-15 and HAPYS domain scores were analyzed using Microsoft Excel. For group differences, non-parametric tests were applied (Shapiro-Wilk,

Kruskal-Wallis with Dwass-Steel-Crichlow-Fligner post-hoc). Spearman's Rank Correlation tested the relationship between cyberchondria and parental well-being.

IV. RESULTS AND DISCUSSION

This section presents how excessive online health searches ("cyberchondria"), measured across five dimensions, affect parental well-being in cognitive, emotional, and behavioral domains. Findings show variations by demographics and family structure, highlighting how these factors shape digital health use, anxiety, and coping of parents, with implications for promoting balanced media use.

Table 1: Degree of Cyberchondria Across Key Domains Among Parents

CONSTRUCTS	SCORE 0 (NOT AFFECTED)	SCORE 1-6 (MODERATELY AFFECTED)	SCORE 7-12 (SEVERELY AFFECTED)	OVERALL MEAN	INTERPRETATION
EXCESSIVENESS	6 (1.5%)	130 (32.5%)	264 (66%)	7.82	SA
COMPULSION	57 (14.25%)	252 (63%)	91 (22.75%)	4.70	MA
DISTRESS	11 (2.76%)	238 (59.5%)	151 (37.75%)	6.09	MA
REASSURANCE	7 (1.75%)	145 (36.25%)	248 (62%)	7.56	SA
MISTRUST	130 (32.5%)	240 (60%)	30 (7.5%)	2.61	MA

¹Legend: 0 = Not Affected (NA); 1-6 = Moderately Affected (MA); 7-12 = Severely Affected (SA)

Among 400 parents, Excessiveness (66%) and Reassurance-seeking (62%) were most evident, followed by Compulsion (63%), Distress (38%), and low Mistrust (M = 2.61). These patterns reflect frequent searching, reassurance needs, and moderate re-checking, with only limited skepticism toward professionals. Consistent with Media Dependency Theory, uncertainty drives reliance on online sources, fueling distress and compulsive checking. From Erikson's view, unresolved uncertainty may erode basic trust. In sum, parental cyberchondria centers on excessive searching and reassurance, requiring better digital literacy and open parent-provider communication.

Table 2: Level of Parental Well-Being along with Thoughts, Feelings, and Behavior

DOMAIN	MEAN	Interpretation
THOUGHTS	2.45	Q
FEELINGS	2.20	S
BEHAVIOR	2.58	Q

²Legend: 0- 0.80 = Not at all (N); 0.81-1.60 = A little(AL); 1.61-2.40 = Sometimes (S); 2.41-3.20 = Quite a lot (Q); 3.21-4.00 = A lot (A)

The mean scores for Thoughts (2.45), Feelings (2.20), and Behaviors (2.58) indicate that health anxiety of parents is strongest in cognitive preoccupation and reassurance-seeking, with less emotional distress. This pattern reflects cognitive-behavioral theory and the Health Belief Model, where maladaptive beliefs and perceived threats drive worry and compensatory behaviors, while Uncertainty Management Theory explains how uncertainty sustains these patterns. Consistent with Media Dependency Theory, reliance on digital sources helps meet informational and behavioral needs but provides limited emotional relief, often reinforcing compulsive searching and occasional mistrust of professionals.

Table 3.1: Degree of Effects of Cyberchondria among parents across demographic groups

Variables	Degree of Effects of Cyberchondria	Interpretation
Age:		
50 and over	5.63	MA
45-49	5.91	MA
40-44	5.89	MA
35-39	5.80	MA
30-34	5.22	MA
29 and below	6.09	MA
Educational Attainment:		
No formal Education/Elementary/High School Graduate	5.63	MA
College Undergraduate/Vocational/ Technical Certification	5.77	MA
Bachelor's degree/Master's Degree/ Doctoral/ Professional Degree	5.81	MA
Socioeconomic Status:		
a. Employment Status		
Full-time	5.92	MA
Part-time, Self-employed	5.58	MA
Unemployed, Retired, Others	5.74	MA
b. Monthly Income		
Less than Php 10,957		MA
Php 10,958-Php 21,914	5.63	MA
Php 21,915 and Above	5.74	MA
	5.96	
Family Structure:		
Matriarchal	5.73	MA
Patriarchal	5.79	MA
Egalitarian	5.77	MA

^{3,1}Legend: 0 = Not Affected (NA); 1-6 = Moderately Affected (MA); 7-12 = Severely Affected (SA)

Results show all groups fall under moderately affected (MA). Younger (≤ 29 years, 6.09 MA) and mid-life parents (35–39 years, 5.80 MA) rely more on online health searches, suggesting a need for targeted digital health literacy to reduce anxiety and misinformation.

Higher education (5.81 MA) correlates with more searching but may help parents better evaluate information, highlighting the importance of critical appraisal skills, especially for less educated groups.

Unemployed (5.74 MA) and low-income parents (5.63 MA) show greater reliance on online health information, reflecting financial vulnerability and the need for accessible, trustworthy health resources.

Family structure had minimal impact, though patriarchal households scored slightly higher (5.79 MA), indicating cultural influences on health information seeking.

Overall, cyberchondria is moderate but influenced by age, education, income, and family dynamics. Interventions should address these factors to improve digital health literacy and reduce distress in vulnerable parents.

Table 3.2: Differences in the degree of effect of cyberchondria across demographic groups

Variables	N	CSS-15 Score Mean	Interpretation	p-value
Age				
50 and over	97	5.63	MA	0.047
45-49	67	5.87	MA	
40-44	62	5.89	MA	
35-39	62	5.81	MA	
30-34	50	5.22	MA	
29 and below	62	6.09	MA	
Educational Attainment:				
• No formal Education/Elementary/High School Graduate	131	5.63	MA	0.243
• College Undergraduate /Vocational/Technical Certification	122	4.41	MA	
• Bachelor's degree/Master's Degree /Doctoral/Professional Degree	147	5.81	MA	
Socioeconomic Status:				
• <i>Employment Status:</i>				0.201
Full Time	157	5.92	MA	
Part-time/Self-employed	144	5.58	MA	
Unemployed/Retired/Others	99	5.75	MA	
• <i>Monthly Income:</i>				0.214
Less than Php 10,957	178	5.63	MA	
Php 10,958 - Php 21,914	118	5.96	MA	
Php 21,915 and Above	104	5.74	MA	
Type of Family Structure:				
Matriarchal	203	5.73	MA	0.921
Patriarchal	82	5.80	MA	
Egalitarian	115	5.77	MA	

^{3,2} Legend: 0 = Not Affected (NA); 1-6 = Moderately Affected (MA); 7-12 = Severely Affected (SA)

Table 3.2 shows that cyberchondria was highest among parents ≤29, those with higher education, full-time workers, middle-income earners, and patriarchal families, while the 30–34 age group, vocationally trained, part-time, and very low/high earners scored lowest. Only age showed a significant difference ($p = 0.047$), with other demographics non-significant. Thus, younger parents appear more vulnerable, but overall, individual health concerns and information-seeking habits drive cyberchondria more than sociodemographic factors.

Table 4.1: Level of Parental Well-Being along with Thoughts, Feelings, and Behavior across demographic groups

Variables	Thoughts		Feelings		Behavior	
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
Age						
50 and Over	2.43	Q	2.18	S	2.53	Q
45-49	2.43	Q	2.19	S	2.39	S
40-44	2.31	S	2.12	S	2.60	Q
35-49	2.54	Q	2.24	S	2.59	Q
30-34	2.43	Q	2.29	S	2.73	Q
29 and below	2.54	Q	2.25	S	2.74	Q
Educational Attainment						
		Thoughts		Feelings		Behavior

No formal Education/Elementary/High School Graduate	2.44	Q	2.20	S	2.58	Q
College Undergraduate/ Vocational/Technical Certification	2.41	Q	2.14	S	2.55	Q
Bachelor's degree/Master's Degree/ Doctoral/Professional Degree	2.31	S	1.35	AL	2.50	Q
Employment Status	Thoughts		Feelings		Behavior	
Full-Time	2.43	Q	2.17	S	2.42	Q
Part-time, Self-employed	2.43	Q	2.03	S	2.58	Q
Unemployed, Retired, Others	2.60	Q	2.19	S	2.93	Q
Monthly Income	Thoughts		Feelings		Behavior	
Less than Php 10,957	2.43	Q	2.22	S	2.67	Q
Php 10,958 - Php 21,914	2.53	Q	2.25	S	2.65	Q
Php 21,915 and Above	2.32	S	2.08	S	2.43	Q
Family Structure	Thoughts		Feelings		Behavior	
Matriarchal	2.47	Q	2.22	S	2.61	Q
Patriarchal	2.38	S	2.17	S	2.51	Q
Egalitarian	2.44	Q	2.20	S	2.58	Q

^{4,1}Legend: 0- 0.80 = Not at all (N); 0.81-1.60 = A little(AL); 1.61-2.40 = Sometimes (S); 2.41-3.20 = Quite a lot (Q); 3.21-4.00 = A lot (A)

Younger parents (≤ 29 , 35–39) showed the highest cognitive worry and vigilance, while midlife and older parents reported lower scores, reflecting steadier health management. Lower education, unemployment, mid–income, and matriarchal households were linked to greater worry and monitoring, whereas higher education, employment, and higher income tempered these effects. Consistent with Media Dependency Theory, vulnerable groups rely more heavily on digital health resources, amplifying anxiety, while more advantaged parents filter information more effectively, reducing its psychological impact.

Table 4.2: Level of Parental Well-Being across demographic groups

Age	Scores
50 and Over	64
45-49	60
40-44	62
35-49	66
30-34	68
29 and below	68
Educational Attainment	Scores
No formal Education/Elementary/High School Graduate	63
College Undergraduate/ Vocational/Technical Certification	63
Bachelor's degree/Master's Degree/ Doctoral/Professional Degree	63
Employment Status	Scores
Full-Time	64
Part-time, Self-employed	61

Unemployed, Retired, Others	67
Monthly Income	Scores
Less than Php 10,957	64
Php 10,958 - Php 21,914	65
Php 21,915 and Above	61
Family Structure	Scores
Matriarchal	65
Patriarchal	62
Egalitarian	63

^{4.2}Legend: Higher scores indicating high levels of Health Anxiety (HA) by Proxy (1-104)

Parents aged 35–39 showed the highest functional burden (score = 12), while those 30–34 and 50+ were lowest (6), indicating peak stress in the late 30s. Burden was greater among the less educated, full-time workers, low–middle-income families, and egalitarian households, highlighting the roles of low health literacy, work strain, financial insecurity, and uncoordinated decision-making. Guided by Media Dependency Theory, these groups rely more on online health sources, which amplifies overload and distress. Supporting theories (Self-Efficacy, Transactional Coping, Uncertainty Management, Buffering) explain how low confidence, emotion-focused searches, and weak social support sustain anxiety and disrupt daily functioning.

Table 4.4: Differences in the Level of Parental Well-Being across demographic groups

One-Way ANOVA (Non-parametric) (Kruskal-Wallis)
Significant difference in the level of parental well-being among parents when grouped according to:

Variables	χ^2	df	p	ϵ^2
Age	3.11	5	0.683	0.00778
Educational Attainment	3.72	2	0.155	0.00931
Employment Status	4.82	2	0.090	0.0120
Monthly Income	6.05	2	0.048*	0.0151
Family Structure	1.68	3	0.642	0.00419

value is >
 significance level is 0.05

^{4.4} Legend: p-
 .0001. The

The Kruskal–Wallis test showed that only income significantly affected parental well-being ($\chi^2 = 6.05$, $p = .048$), while age, education, employment, and family structure were non-significant. This suggests that cyberchondria impacts well-being similarly across most groups, with financial stability offering only a small coping advantage. Post-hoc tests found no meaningful pairwise income differences, implying income alone does not strongly shape well-being under digital health uncertainty.

Correlation Between the degree of cyberchondria or excessive online health searches and parental well-being

Table

Spearman's rho	P-value	Correlation
0.464	<.001	<.001

5:

Correlation Between the degree of cyberchondria or excessive online health searches and parental well-being

⁵Legend: p-value is <.001. The significance level is 0.05. Spearman's rho is 0.464. Weak correlation: $|r| \approx 0.1$ to 0.3. Moderate correlation: $|r| \approx 0.4$ to 0.6. Strong correlation: $|r| > 0.7$.

A moderate positive correlation ($\rho = 0.464, p < .001$) indicates that as cyberchondria increases, parental well-being tends to decline. Statistically, this means that cyberchondria explains roughly 21% of the variance in parental well-being ($\rho^2 \approx 0.21$), a meaningful effect in behavioral and health sciences where multiple factors influence outcomes. In practical terms, this suggests that while cyberchondria is not the sole determinant of well-being, it is a substantial contributor that healthcare providers cannot overlook. Excessive searching and reassurance-seeking erode confidence in medical advice, fuel anxiety, and delay appropriate care (McMullan et al., 2019; Starčević et al., 2021).

From an intervention perspective, the effect size underscores the need for strategies that balance digital information-seeking with supportive resources. Building coping skills of parents, enhancing health literacy, and fostering strong social support networks can buffer against distress (Lee & Cho, 2023; Smith & Johnson, 2022). Grounded in Media Dependency, Self-Efficacy, Stress and Coping, and Uncertainty Management theories, the findings highlight opportunities for culturally sensitive nursing interventions that reduce overreliance on online sources and promote healthier decision-making.

V. CONCLUSION

The study shows that cyberchondria undermines parental well-being by heightening anxiety, lowering resilience, and reinforcing cycles of excessive searching and reassurance-seeking. These patterns, most evident in thoughts and behaviors, lead to psychological distress and reduced family stability. Grounded in Media Dependency Theory, the findings highlight the need for digital health literacy initiatives, culturally relevant resources, and nursing-led strategies within clinical care, education, and family support. Beyond individual interventions, broader systems-level responses are essential: healthcare institutions must integrate digital literacy into patient education, policymakers should establish guidelines for safe online health information, and technology firms should collaborate with government and health agencies to curb misinformation. Multisectoral cooperation ensures that parents are equipped not only with access to information but also with the skills and support to interpret it in health-affirming ways.

AUTHORS' CONTRIBUTIONS

Study concept and design: All authors contributed equally to the development of the overall research framework; **Acquisition of data:** All authors contributed equally to the process of data gathering procedure; **Analysis and interpretation of data:** A.A., M.M.A., C.D.C., S.C.C., J.G.G., J.B.G., R.A.L., A.L.M., R.A.M., J.T.M., and C.M.M.; **Statistical analysis:** A.A., C.D.C., S.C.C., J.G.G., J.B.G., R.A.L., A.L.M., R.A.M., J.T.M., and C.M.M.;

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