

Original Paper

Trends in the Implementation of the Cyberchondria Severity Scale: Bibliometric Analysis

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Abstract

Background: Cyberchondria, a combination of the words “cyber” and “hypochondriasis,” is a condition that is receiving increasing attention from clinicians and researchers globally. Researchers are currently using multiple instruments to quantify it. Furthermore, the instruments have been translated into multiple languages.

Objective: This study aimed to examine the extent to which researchers are measuring cyberchondria using the 33-item Cyberchondria Severity Scale (CSS) and its 12-item abbreviated version, the CSS-12. It also examined the relative use of cyberchondria instruments in different languages.

Methods: PubMed and PsycInfo were searched for articles published between May 1, 2019, and December 31, 2024, featuring the term “cyberchondria” in the title. Included articles mentioned the CSS, were empirical studies, and were in English. Each article was categorized by the CSS version, publication year, and language of instrument implementation. Fisher exact tests were used to assess associations, and the Spearman rank correlation coefficient was used to evaluate trend monotonicity.

Results: Among the 117 articles included in the analysis, 42 (35.9%) used the CSS, 38 (32.5%) used the CSS-12, and the remaining 37 (31.6%) used unknown or modified versions. Although CSS-12 use began with its introduction in 2019, there was no significant association between publication year and instrument choice ($P=.84$). Unadjusted analysis found that the relationship between year and the percentage of articles using the CSS-12 showed a statistically significant monotonic trend ($Q=0.89$; $P=.02$). This finding was not significant after applying a Bonferroni correction. However, there was a significant association between the language of the instrument and the CSS version used ($P<.001$).

Conclusions: From 2019 to 2024, both the CSS and CSS-12 continued to be used. The CSS-12 offers benefits such as brevity and the removal of reverse-keyed items, while the original CSS remains useful for studies that require the mistrust of medical professionals subscale. The significant association between language and instrument choice suggests that cultural and linguistic factors impact selection, and instrument choice should be guided by the study’s objectives and the constructs of interest.

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Keywords: health anxiety; health information seeking behavior; hypochondriasis; hypochondria; Cyberchondria Severity Scale; CSS; 12-item Cyberchondria Severity Scale; CSS-12

Introduction

Definition and Current Measurement Tools

Cyberchondria is a portmanteau of the words “cyber” and “hypochondriasis.” Its measurement was first formalized through the development of the Cyberchondria Severity Scale (CSS) in 2014 [1]. In its original format, the CSS consists of a 33-item questionnaire, grouped into 5 subscales, some of which identify behaviors (ie, compulsiveness, excessiveness, and reassurance seeking) or mental states (ie, distress). An additional subscale, mistrust of medical professionals, has the potential to be problematic, as it may measure a construct that is *different from, but related to*, the other 4 cyberchondria subscales [2].

In response to both the length of the original, long-form CSS and the potential issues surrounding the mistrust of medical professionals subscale, an abbreviated version called the CSS-12 was developed in 2019 [3]. The CSS-12 consists of a 12-item questionnaire containing questions drawn from the original version; however, it does not include any items related to the mistrust of medical professionals. The creators of the original CSS were involved in the development and validation of CSS-12 and thus have implicitly endorsed it.

Since their creation, the CSS and CSS-12 have been used in numerous studies and have become de facto standards for the measurement of cyberchondria. A potential overreliance on the CSS is acknowledged in the literature [4]. Furthermore, the instruments have been translated into other languages and have been extensively used in adapted forms. On this note, in 2016, a German team created the 15-question German version of the instrument, dubbed the CSS-15 [5]. Additional novel instruments have been developed, some of which include the aforementioned mistrust of medical professionals construct [6,7].

Study Aims

There is widespread use of the CSS and CSS-12 and a lack of research comparing their relative use. To address this lacuna, this study aims to provide future researchers with greater understanding of the extent to which each version is used and the degree to which each version is being used in languages other than English. It additionally aims to contribute to the discussion of the various contexts in which inclusion of the mistrust of medical professionals subscale is helpful. To achieve these aims, we conducted a review of the literature to determine the relative frequency with which the CSS and CSS-12 were used and the languages in which they were used. While conducting this review, situations in which noncanonical forms of the questionnaire were used were noted.

Methods

Ethical Considerations

Ethics approval and informed consent were not applicable because this study examined the published literature, rather than human participants.

Search Strategy and Sample Selection

In September 2025, PubMed and PsycInfo were searched for all potentially relevant articles published between May 1, 2019, the date of publication of the article defining the CSS-12, and December 31, 2024, the last day of the most recent calendar year. PubMed is a free tool that searches the archive of biomedical and life sciences journal literature maintained by the United States National Library of Medicine. It may be most accessible to clinical practitioners without institutional access to paywalled sources. PsycInfo is a database of articles administered by the American Psychological Association. Articles likely to be about cyberchondria were initially identified by searching for peer-reviewed, published articles with “cyberchondria” in the title. A pool of articles to evaluate was created by removing the duplicates found by both sources. Articles were excluded if they were replies, corrigenda, letters to the editor, letters from the editor, or not actually published during the search period. Further exclusions were made for articles that were not in English, were reviews, contained conceptual analysis, or did not measure cyberchondria.

Measurement

Each article was reviewed to determine whether it used the original 33-question CSS, the CSS-12, another form of the CSS (eg, the CSS-15 or an author-derived version), or an unknown version. Culturally equivalent translations of the CSS or CSS-12 from English into another language were classified as being the instrument that was translated. The process used to determine the version of the scale used is described in [Multimedia Appendix 1](#). Two variables were created to capture the language of the instrument: 1 variable that categorized studies as having used an instrument with an “unspecified” language if it was not explicitly stated and 1 variable that attempted to infer the language of the instrument used in studies based upon the context in which they were conducted. The process used to ascertain the language used in an article is described in [Multimedia Appendix 2](#).

Articles were additionally classified by year of publication and by the language in which the instrument was implemented. While only English-language articles were considered, articles were written by authorship teams from various nations and, in many cases, reported on empirical research that was not conducted in English. Studies conducted in English-speaking countries were assumed to have used an English version of the instrument, unless explicitly stated otherwise. This assumption was made, as the original implementations of the CSS and CSS-12 were in English.

Analysis

For each year, 2019 to 2024, the number of articles using the CSS, the CSS-12, and other variations of the CSS was determined by reviewing the contents of the articles meeting the sample selection criteria, and results were recorded in a table. If the version of the CSS used could not be determined, it was classified as “unknown.” Fisher exact tests were used to assess the relationship between year and the type of CSS instrument used, considering both the totality of the articles and a subset using only the CSS or CSS-12. Spearman rank correlation coefficient was calculated to determine whether there was a trend in the percentage of cyberchondria articles using the CSS-12 that was monotonic. The percentage of cyberchondria articles using the CSS-12 was then plotted by year using a scatterplot.

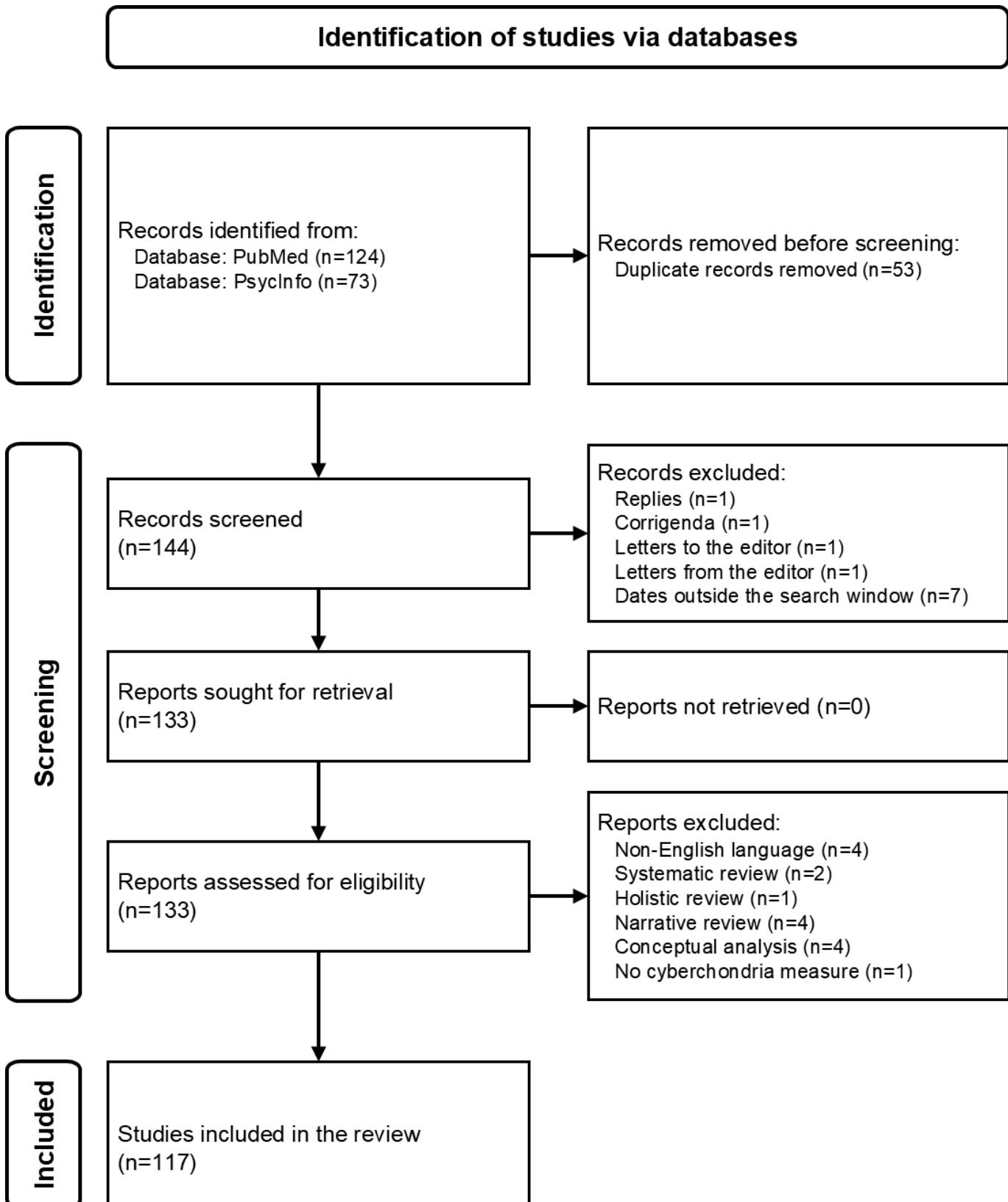
The sample was examined to determine the language used to assess cyberchondria in each study considered. For each

language found in the sample, the number of studies using the CSS, the CSS-12, and author-derived variations of the CSS was determined. Fisher exact tests were run to assess whether a significant association existed between language and CSS implementation used, again considering both the totality of the articles and the subset using only the CSS or CSS-12.

Results

Searching PubMed yielded 124 articles, and searching PsycInfo yielded 73 articles. Of these 197 articles, 144 (73.1%) were unique. The exclusion criteria were applied as shown in the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) diagram (Figure 1), leading to 117 (59.4%) studies being included in the review. Of these 117 articles, 42 (35.9%) used the CSS, 38 (32.5%) used the CSS-12, 36 (30.8%) used other instruments, and 1 (0.9%) used an unknown instrument.

Figure 1. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) diagram depicting the sample creation process.



As shown in Table 1, while the CSS-12 was introduced in 2019, it took some time for it to gain widespread use after its initial introduction [3]. Only 11% (1/9) of the articles used it in 2020, and only 36% (5/14) of the articles used it in 2021. A Fisher exact test did not identify a significant association between the year of publication and the instrument

used ($P=.84$). When a Fisher exact test was run considering only studies that used the CSS or CSS-12 (excluding studies using instruments classified as other and unknown), there was still no significant relationship between the year of publication and the instrument used ($P=.54$). Spearman rank correlation coefficient showed a statistically significant

monotonic relationship between the year of publication and the proportion of studies using the CSS-12 ($\rho=0.89$; $P=.02$). The year in which the greatest proportion of the studies used

the CSS-12 was 2024, when 39% (9/23) of the studies used the instrument.

Table 1. Instrument use by year, 2019 to 2024.

	CSS ^a , n (%)	CSS-12 ^b , n (%)	Other, n (%)	Unknown, n (%)
2019 (n=6)	2 (33.3) [8,9]	1 (16.7) [3]	3 (50) [7,10,11]	0 (0)
2020 (n=9)	5 (55.6) [12-16]	1 (11.1) [17]	3 (33.3) [18-20]	0 (0)
2021 (n=14)	6 (42.9) [21-26]	5 (35.7) [27-31]	3 (21.4) [32-34]	0 (0)
2022 (n=39)	15 (38.5) [35-49]	12 (30.8) [50-61]	11 (28.2) [62-72]	1 (2.6) [73]
2023 (n=26)	6 (23.1) [74-79]	10 (38.5) [80-89]	10 (38.5) [90-99]	0 (0)
2024 (n=23)	8 (34.8) [100-107]	9 (39.1) [108-116]	6 (26.1) [6,117-121]	0 (0)
Grand total (n=117)	42 (35.9)	38 (32.5)	36 (30.8)	1 (0.9)

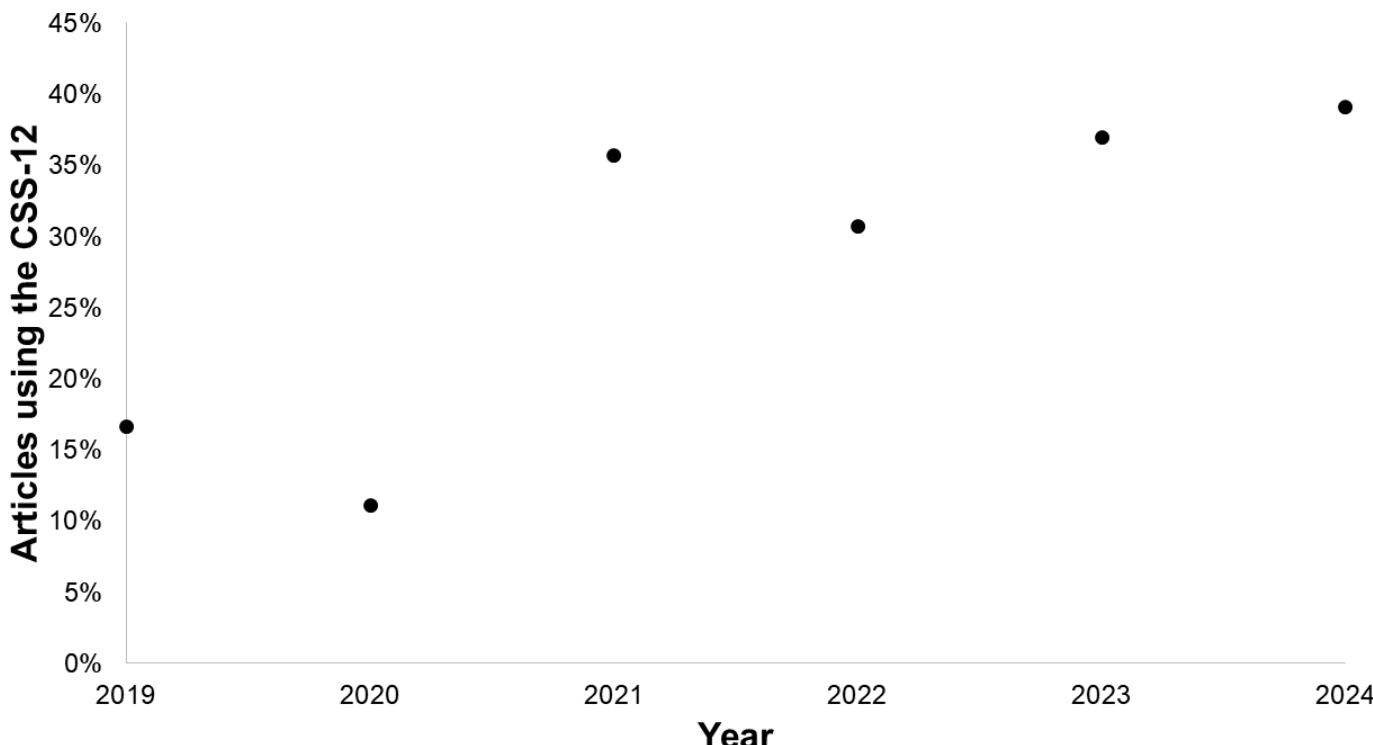
^aCSS: Cyberchondria Severity Scale.

^bCSS-12: 12-item Cyberchondria Severity Scale.

As shown in the scatterplot presented in [Figure 2](#), the only cyberchondria article published in 2019 mentioning the CSS-12 was the article that defined the instrument [3]. Use of the CSS-12 exceeded use of the CSS in 2023 and 2024, but

studies using the CSS-12 did not account for the majority of studies due to the various other versions of the instrument that were used.

Figure 2. Percentage of cyberchondria articles using the 12-item Cyberchondria Severity Scale (CSS-12) by year.



As shown in [Table 2](#), among the articles that explicitly stated the language that was used, the CSS saw the greatest adoption in articles that implemented it in Turkish (14/42, 33%), and the CSS-12 saw the greatest adoption in articles that implemented it in Chinese (6/38, 16%) or Turkish (6/38,

16%). The languages for which there were more articles written using the CSS-12 than the CSS were Arabic (4/5, 80%), Chinese (6/9, 67%), Persian (3/4, 75%), Russian (1/1, 100%), Spanish (2/2, 100%), and Serbian (1/2, 50%). A Fisher exact test identified a significant association between

the language in which an article implemented its cyberchondria measurement and the instrument used ($P<.001$). When articles using an instrument other than the CSS or CSS-12 were excluded from the analysis, a Fisher exact test likewise

identified a significant association between the language in which an article implemented its cyberchondria measurement and the instrument used ($P=.03$).

Table 2. Instrument use by language (ambiguous cases classified as “unspecified”).

Language	CSS ^a , n (%)	CSS-12 ^b , n (%)	Other, n (%)	Unknown, n (%)
Arabic (n=5)	0 (0)	4 (80) [27,80-82]	1 (20) [117]	0 (0)
Chinese (n=9)	2 (22.2) [35,74]	6 (66.7) [28,50,83,108-110]	1 (11.1) [90]	0 (0)
Croatian (n=6)	1 (16.7) [100]	0 (0)	5 (83.3) [7,18,91,92,118]	0 (0)
English (n=18)	7 (38.9) [8,9,12,13,21,22,36]	5 (27.8) [3,84,111-113]	5 (27.8) [10,32,62,93,119]	1 (5.6) [73]
French (n=1)	0 (0)	1 (100) [85]	0 (0)	0 (0)
German (n=3)	1 (33.3) [101]	0 (0)	2 (66.7) [19,63]	0 (0)
Indonesian (n=1)	0 (0)	0 (0)	1 (100) [64]	0 (0)
Italian (n=6)	3 (50) [14,37,38]	3 (50) [29,51,52]	0 (0)	0 (0)
Korean (n=1)	0 (0)	0 (0)	1 (100) [94]	0 (0)
Persian (n=4)	1 (25) [75]	3 (75) [17,30,53]	0 (0)	0 (0)
Polish (n=8)	7 (87.5) [15,23,24,39,102-104]	1 (12.5) [54]	0 (0)	0 (0)
Portuguese (n=1)	1 (100) [40]	0 (0)	0 (0)	0 (0)
Russian (n=1)	0 (0)	1 (100) [55]	0 (0)	0 (0)
Serbian (n=2)	0 (0.0)	1 (50.0) [56]	1 (50.0) [95]	0 (0.0)
Spanish (n=2)	0 (0)	2 (100) [57,86]	0 (0)	0 (0)
Turkish (n=24)	14 (58.3) [25,41-46,76-79,105-107]	6 (25) [31,58-60,87,114]	4 (16.7) [33,65,66,96]	0 (0)
Urdu (n=1)	0 (0)	0 (0)	1 (100) [99]	0 (0)
Unspecified (n=24)	5 (20.8) [16,26,47-49]	5 (20.8) [61,88,89,115,116]	14 (58.3) [6,11,20,34,67-72,97,98,120,121]	0 (0)
Grand total (n=117)	42 (35.9)	38 (32.5)	36 (30.8)	1 (0.9)

^aCSS: Cyberchondria Severity Scale.

^bCSS-12: 12-item Cyberchondria Severity Scale.

In Table 2, of the 117 articles, the language of the instrument was unspecified in 24 (20.5%), as no explicit statement was provided. However, because the language can often be inferred from the national context in which the study was conducted, Table 3 reports scale use by language,

incorporating both explicitly stated and inferred languages. In this revised analysis, studies implementing the traditional CSS in Turkish were most common (15/42, 36% articles), whereas among studies using the CSS-12, those implement-

ing it in English (7/38, 18%) or Turkish predominated (7/38, 18%).

Table 3. Instrument use by language (languages inferred for ambiguous cases).

Language	CSS ^a , n (%)	CSS-12 ^b , n (%)	Other, n (%)	Unknown, n (%)
Arabic (n=6)	0 (0)	4 (66.7) [27,80-82]	2 (33.3) [67,117]	0 (0)
Chinese (n=16)	2 (12.5) [35,74]	6 (37.5) [28,50,83,108-110]	8 (50) [6,34,68,71,72,90,120,121]	0 (0)
Croatian (n=6)	1 (16.7) [100]	0 (0)	5 (83.3) [7,18,91,92,118]	0 (0)
English (n=28)	9 (32.1) [8,9,12,13,21,22,36,47,48]	7 (25) [3,84,111-113,115,116]	11 (39.3) [10,11,20,32,62,69,70,93,97,98,119]	1 (3.6) [73]
French (n=1)	0 (0)	1 (100) [85]	0 (0)	0 (0)
German (n=3)	1 (33.3) [101]	0 (0)	2 (66.7) [19,63]	0 (0)
Indonesian (n=1)	0 (0)	0 (0)	1 (100) [64]	0 (0)
Italian (n=6)	3 (50) [14,37,38]	3 (50) [29,51,52]	0 (0)	0 (0)
Korean (n=1)	0 (0)	0 (0)	1 (100) [94]	0 (0)
Persian (n=5)	1 (20) [75]	4 (80) [17,30,53,61]	0 (0)	0 (0)
Polish (n=9)	7 (77.8) [15,23,24,39,102-104]	2 (22.2) [54,88]	0 (0)	0 (0)
Portuguese (n=1)	1 (100) [40]	0 (0)	0 (0)	0 (0)
Romanian (n=2)	2 (100) [16,26]	0 (0)	0 (0)	0 (0)
Russian (n=1)	0 (0)	1 (100) [55]	0 (0)	0 (0)
Serbian (n=2)	0 (0)	1 (50) [56]	1 (50) [95]	0 (0)
Spanish (n=2)	0 (0)	2 (100) [57,86]	0 (0)	0 (0)
Turkish (n=26)	15 (57.7) [25,41-46,49,76-79,105-107]	7 (26.9) [31,58-60,87,89,114]	4 (15.4) [33,65,66,96]	0 (0)
Urdu (n=1)	0 (0)	0 (0)	1 (100) [99]	0 (0)
Grand total (n=117)	42 (35.9)	38 (32.5)	36 (30.8)	1 (0.9)

^aCSS: Cyberchondria Severity Scale.

^bCSS-12: 12-item Cyberchondria Severity Scale.

As was the case in which languages were not inferred, a Fisher exact test found a significant association between the language in which an article implemented its cyberchondria measurement and the instrument used ($P<.001$); this association remained significant ($P=.03$) when articles using an instrument other than the CSS or CSS-12 were excluded.

Discussion

Adoption Trends

From the results in [Table 1](#), it appears that the CSS-12 [3] had not completely replaced the CSS [1] in 2024. Given that

there is no financial cost to switching instruments, it would be expected that the CSS-12 would completely replace the CSS over time if the 2 were perfect substitutes. This would be expected, as the CSS-12 is less time intensive to administer and is potentially less confusing for respondents due to its lack of reverse-keyed questions (eg, those measuring mistrust of medical professionals). The CSS-12's shorter length is potentially beneficial for both completion rates and the cost of administration. The main barriers to adoption of the CSS-12 in a study are researcher awareness and development of the study design after gaining awareness of the CSS-12. That said, the correlation between year and the proportion of cyberchondria studies using the CSS-12 achieved significance ($q=0.89$; $P=.02$), and it appears that there was a monotonic relationship trending toward greater use of the CSS-12 over time.

Measurement of the Mistrust of Medical Professionals

Given that the CSS-12 had been available for more than 4 years by the start of 2024, the fact that out of 23 studies, 8 (34.8%) used the original CSS in 2024 suggests that the CSS-12 may not be a perfect substitute. One key difference between the CSS and CSS-12 is that the CSS contains a subscale related to the mistrust of medical professionals, whereas the CSS-12 does not. Furthermore, this omission in the CSS-12 also makes it less suitable as an instrument for the study of the relationship between the mistrust of medical professionals and cyberchondria or other health issues, such as health anxiety [122].

Further research needs to be conducted to determine whether mistrust of medical professionals is a subconstruct related to, but distinct from, cyberchondria [2,13,38,123]. Concern over it being a distinct construct initially prompted its removal [3]. Some authors have opted to use the CSS without the reverse-keyed mistrust of medical professionals questions, citing concerns with the 5-factor structure of the CSS [8,24,36,47]. However, as the cyclical, reinforcing role of problematic digital information searches has been proposed to be a focal feature of cyberchondria presentations [124], barriers to accessing information from medical professionals constitute a concern of significant relevance. A lack of trust in health care providers broadly identifies a potential barrier to the access, use, and provision of care.

Measuring mistrust of medical professionals is relevant in public health and clinical care settings. Globally, most people do not trust medical professionals. The Wellcome Global Monitor 2020, a survey of more than 119,000 people residing in 113 countries, found that only 45% of people trust physicians and nurses in their country [125]. Measuring mistrust of medical professionals is increasingly important due to the erosion of trust that occurred during the COVID-19 pandemic. A repeated survey of Americans found that the proportion of adults who reported “a lot” of trust for physicians and hospitals declined from 71.5% in April 2020 to 40.1% in January 2024 [126]. These data suggest that the percentage of Americans with some doubts about the trustworthiness of medical professionals became the majority

over this period. Furthermore, the study did not find signs that trust was rebounding. As mistrust of medical professionals becomes more common, it may be worth further exploring the nature of its association with cyberchondria, or its potential role as a control variable [127]. As these applications can only be performed with the original, long-form CSS, they provide a potential source of relevance for the measure going forward.

Moreover, measuring mistrust is important because cyberchondria can harm health care relationships between health care providers and patients in primary care settings [128,129] and may lead to “doctor shopping.” Despite its impact on use, the degree to which mistrust impacts health care utilization has been underexplored [103]. Furthermore, health care providers may experience patients with cyberchondria as difficult to treat [128], which could lead to increased clinician burnout or stress. Outside of primary care settings, specifically within psychotherapy, strong care relationships are associated with positive outcomes [130]. This suggests that measuring and managing mistrust may alert health care providers to patients who may require additional communication or support. Additionally, across the reviewed literature, the importance of successful health care provider and patient communication is often referenced [49, 51,54,73], and additional literature specifically mentions the importance of care alliances [131]. Consequently, identifying these patients may combat potential clinician burnout or stress and could arguably support successful care outcomes across medical and psychotherapeutic settings.

Infodemic-related concerns are also linked to cyberchondria [132] and are referenced in the reviewed literature [101,111,118]. This factor places strain on health systems [133] and may be of special relevance to the mistrust of medical professionals construct, as patients may encounter information online that contradicts their health care providers’ recommendations. Digital literacy, for example, has been suggested as a supportive generalist cyberchondria intervention [116] and was included in the sole intervention identified in our review [14]. That said, higher digital literacy is also associated with higher cyberchondria scores, and the relationship may be mediated, moderated, or associated with other constructs [99,100,110,121].

Social Contagion in Instrument Selection

If an author uses an instrument while working on 1 study, or sees an instrument cited in a study written by someone within their professional or social network, they may be more likely to use it. Social contagion has been demonstrated in other clinical contexts. Specifically, it has been shown that there was social contagion in surgeons’ adoption of perioperative advanced imaging when performing surgeries for the treatment of breast cancer. Patients treated by surgeons whose peers had the highest rates of imaging use were more likely to receive imaging than patients treated by surgeons whose peers had lower rates of use [134]. Likewise, social contagion may impact a researcher’s desire to pursue a study on a topic such as cyberchondria.

In 2016, a German research group produced a 15-item version of the CSS in the German language [5]. It has been noted that some items loaded on different factors in the German implementation of the CSS than in the original version, creating a fundamental difference [5,14]. The German 15-item version of the CSS was translated into English and used by several India-based researchers [10,11,70]. This repeated use of a nonstandard version of the CSS may illustrate social contagion, especially because the modified instrument was reused in a different country and language than the one in which it originated. Additionally, both canonical versions of the scale are designed for English language use and therefore could be easier to deploy in a country that uses English as an official working language. Furthermore, the loading of items onto different factors in the German 15-item version of the CSS has the potential to reduce the comparability of studies based upon this implementation of the CSS versus other versions. Social contagion and ease of implementation may also explain why researchers using one language, such as Turkish, favor the CSS, while those using another, such as Chinese, favor the CSS-12. Further research is needed to assess the impact of social contagion on instrument selection.

Issues Related to Localization

There are both benefits and drawbacks to the localization of the CSS and CSS-12 into various languages. Providing patients with written materials in their native languages has been shown to improve comprehension [135]. However, translations of an instrument into a language may vary across researchers, leading to inconsistency in implementation, even when the same underlying instrument is used. For instance, some English medical terms have been shown to have multiple Arabic equivalents, potentially leading translations to differ [136]. Furthermore, the somatic features of depression have been shown to vary across cultures, suggesting that even standardized medical terms may be conceptualized and experienced differently by people in different contexts [137]. The developers of the Chinese CSS stated that cultural factors may influence both the presence of and responses to cyberchondria-like behaviors. Within a Chinese context, both linguistic and cultural factors influence instrument translation; “excessiveness” is a noteworthy example, as the authors explain that simply choosing to see a physician may be seen as excessive in China [74]. Finally, as the original CSS contains reverse-keyed questions and the CSS-12 does not, the CSS-12 may confer additional clarity or interpretation advantages when translated.

Multiple Hypothesis Testing

As the study used multiple hypothesis tests, it is possible that some statistically significant findings were false positives. The analysis included 6 Fisher exact tests and 1 Spearman rank correlation coefficient, for a total of 7 hypothesis tests. If

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Data Availability

the desired significance threshold is $\alpha=.05$, then the Bonferroni correction implies that findings would remain significant only if the P value was $<.007$.

While Spearman rank correlation coefficient showed a statistically significant ($P=.02$) monotonic relationship between the year of publication and the proportion of studies using the CSS-12 before the Bonferroni correction was applied, the relationship was not statistically significant after considering the Bonferroni correction. The Fisher exact tests assessing the association between use of any cyberchondria scale and language of implementation, using the data in Tables 2 and 3, were all significant at the $P<.001$ level. These results therefore remained statistically significant after application of the Bonferroni correction. However, when the analyses were restricted to articles that used only the CSS or CSS-12, the Fisher exact tests for Tables 2 and 3 each yielded $P=.03$, which did not meet the Bonferroni-adjusted significance threshold.

Limitations

While this analysis captured the articles indexed by PubMed and PsycInfo, some relevant articles not included in these databases may have been missed. Likewise, there is often a body of gray literature consisting of unpublished manuscripts that are not publicly available due to their lack of significant findings, the direction of their findings, or abandonment by their authors. Therefore, while the findings do not necessarily represent all research conducted using the CSS, they do reflect the research accessible through 2 commonly used search tools, PubMed and PsycInfo.

Conclusions

This study examined how often the CSS and CSS-12 have been used in the literature, the languages in which they have been implemented, and the contexts in which each version may be preferable. From 2019 to 2024, both instruments continued to be used. Although the increasing adoption of the CSS-12 over time showed an unadjusted statistically significant monotonic trend ($P=.02$), this association did not remain significant after Bonferroni correction for multiple comparisons. The CSS-12 offers advantages such as brevity and the removal of reverse-keyed items, while the original CSS remains useful for studies that require the mistrust of medical professionals subscale. Researchers selecting an instrument should consider the benefits of shorter administration and improved clarity alongside the need to measure constructs unique to the full CSS, as well as the availability and quality of translations into the target population’s language. Instrument choice should be guided by the study’s objectives, the constructs of interest, and the cultural and linguistic context. Further research is needed to determine the interchangeability of adapted and translated versions with the original 33-item English CSS.

Data sharing is not applicable to this paper as no datasets were generated or analyzed during this study.

Conflicts of Interest

ACP previously served on the Editorial Board of *JMIR Mental Health* and currently serves on the Editorial Board of the *Journal of Participatory Medicine*, a JMIR journal.

Multimedia Appendix 1

Process used to assign a scale to an article.

[[PDF File \(Adobe File\), 67 KB-Multimedia Appendix 1](#)]

Multimedia Appendix 2

Process used to assign a language to an article.

[[PDF File \(Adobe File\), 68 KB-Multimedia Appendix 2](#)]

References

1. McElroy E, Shevlin M. The development and initial validation of the cyberchondria severity scale (CSS). *J Anxiety Disord*. Mar 2014;28(2):259-265. [doi: [10.1016/j.janxdis.2013.12.007](https://doi.org/10.1016/j.janxdis.2013.12.007)] [Medline: [24508033](https://pubmed.ncbi.nlm.nih.gov/24508033/)]
2. Fergus TA. The Cyberchondria Severity Scale (CSS): an examination of structure and relations with health anxiety in a community sample. *J Anxiety Disord*. Aug 2014;28(6):504-510. [doi: [10.1016/j.janxdis.2014.05.006](https://doi.org/10.1016/j.janxdis.2014.05.006)] [Medline: [24956357](https://pubmed.ncbi.nlm.nih.gov/24956357/)]
3. McElroy E, Kearney M, Touhey J, Evans J, Cooke Y, Shevlin M. The CSS-12: development and validation of a short-form version of the cyberchondria severity scale. *Cyberpsychol Behav Soc Netw*. May 2019;22(5):330-335. [doi: [10.1089/cyber.2018.0624](https://doi.org/10.1089/cyber.2018.0624)] [Medline: [31013440](https://pubmed.ncbi.nlm.nih.gov/31013440/)]
4. McMullan RD, Berle D, Arnáez S, Starcevic V. The relationships between health anxiety, online health information seeking, and cyberchondria: systematic review and meta-analysis. *J Affect Disord*. Feb 15, 2019;245:270-278. [doi: [10.1016/j.jad.2018.11.037](https://doi.org/10.1016/j.jad.2018.11.037)] [Medline: [30419526](https://pubmed.ncbi.nlm.nih.gov/30419526/)]
5. Barke A, Bleichhardt G, Rief W, Doering BK. The Cyberchondria Severity Scale (CSS): German validation and development of a short form. *Int J Behav Med*. Oct 2016;23(5):595-605. [doi: [10.1007/s12529-016-9549-8](https://doi.org/10.1007/s12529-016-9549-8)] [Medline: [26931780](https://pubmed.ncbi.nlm.nih.gov/26931780/)]
6. Hsu WC. Developing a cyberchondria severity scale to promote self-care among university students during COVID-19. *Sci Rep*. Oct 10, 2024;14(1):23683. [doi: [10.1038/s41598-024-74829-z](https://doi.org/10.1038/s41598-024-74829-z)] [Medline: [39390121](https://pubmed.ncbi.nlm.nih.gov/39390121/)]
7. Jokić-Begić N, Mikac U, Čuržik D, Sangster Jokić C. The development and validation of the Short Cyberchondria Scale (SCS). *J Psychopathol Behav Assess*. Dec 2019;41(4):662-676. [doi: [10.1007/s10862-019-09744-z](https://doi.org/10.1007/s10862-019-09744-z)]
8. Gibler RC, Jastrowski Mano KE, O'Bryan EM, Beadel JR, McLeish AC. The role of pain catastrophizing in cyberchondria among emerging adults. *Psychol Health Med*. Nov 26, 2019;24(10):1267-1276. [doi: [10.1080/13548506.2019.1605087](https://doi.org/10.1080/13548506.2019.1605087)]
9. Starcevic V, Baggio S, Berle D, Khazaal Y, Viswasam K. Cyberchondria and its relationships with related constructs: a network analysis. *Psychiatr Q*. Sep 2019;90(3):491-505. [doi: [10.1007/s11126-019-09640-5](https://doi.org/10.1007/s11126-019-09640-5)] [Medline: [31098922](https://pubmed.ncbi.nlm.nih.gov/31098922/)]
10. Dagar D, Kakodkar P, Shetiya SH. Evaluating the cyberchondria construct among computer engineering students in Pune (India) using cyberchondria severity scale (CSS-15). *Indian J Occup Environ Med*. 2019;23(3):117-120. [doi: [10.4103/ijoe.ijoe_217_19](https://doi.org/10.4103/ijoe.ijoe_217_19)] [Medline: [31920260](https://pubmed.ncbi.nlm.nih.gov/31920260/)]
11. Makarla S, Gopichandran V, Tondare D. Prevalence and correlates of cyberchondria among professionals working in the information technology sector in Chennai, India: a cross-sectional study. *J Postgrad Med*. 2019;65(2):87-92. [doi: [10.4103/jpgm.JPGM_293_18](https://doi.org/10.4103/jpgm.JPGM_293_18)] [Medline: [31036778](https://pubmed.ncbi.nlm.nih.gov/31036778/)]
12. Akhtar M, Fatima T. Exploring cyberchondria and worry about health among individuals with no diagnosed medical condition. *J Pak Med Assoc*. Jan 2020;70(1):90-95. [doi: [10.5455/JPMA.8682](https://doi.org/10.5455/JPMA.8682)] [Medline: [31954030](https://pubmed.ncbi.nlm.nih.gov/31954030/)]
13. Newby JM, McElroy E. The impact of internet-delivered cognitive behavioural therapy for health anxiety on cyberchondria. *J Anxiety Disord*. Jan 2020;69:102150. [doi: [10.1016/j.janxdis.2019.102150](https://doi.org/10.1016/j.janxdis.2019.102150)] [Medline: [31739276](https://pubmed.ncbi.nlm.nih.gov/31739276/)]
14. Marino C, Fergus TA, Vieno A, Bottesi G, Ghisi M, Spada MM. Testing the Italian version of the cyberchondria severity scale and a metacognitive model of cyberchondria. *Clin Psychology and Psychotherapy*. Jul 2020;27(4):581-596. URL: <https://onlinelibrary.wiley.com/toc/10990879/27/4> [doi: [10.1002/cpp.2444](https://doi.org/10.1002/cpp.2444)]
15. Bajcar B, Babiak J. Neuroticism and cyberchondria: the mediating role of intolerance of uncertainty and defensive pessimism. *Pers Individ Dif*. Aug 2020;162:110006. [doi: [10.1016/j.paid.2020.110006](https://doi.org/10.1016/j.paid.2020.110006)]
16. Maftei A, Holman AC. Cyberchondria during the coronavirus pandemic: the effects of neuroticism and optimism. *Front Psychol*. 2020;11:567345. [doi: [10.3389/fpsyg.2020.567345](https://doi.org/10.3389/fpsyg.2020.567345)] [Medline: [33192848](https://pubmed.ncbi.nlm.nih.gov/33192848/)]
17. Seyed Hashemi SG, Hosseini Nezhad S, Dini S, Griffiths MD, Lin CY, Pakpour AH. The mediating effect of the cyberchondria and anxiety sensitivity in the association between problematic internet use, metacognition beliefs, and

fear of COVID-19 among Iranian online population. *Heliyon*. Oct 2020;6(10):e05135. [doi: [10.1016/j.heliyon.2020.e05135](https://doi.org/10.1016/j.heliyon.2020.e05135)] [Medline: [33088933](#)]

18. Jokic-Begic N, Lauri Korajlija A, Mikac U. Cyberchondria in the age of COVID-19. *PLoS ONE*. 2020;15(12):e0243704. [doi: [10.1371/journal.pone.0243704](https://doi.org/10.1371/journal.pone.0243704)] [Medline: [33332400](#)]

19. Jungmann SM, Withöft M. Health anxiety, cyberchondria, and coping in the current COVID-19 pandemic: which factors are related to coronavirus anxiety? *J Anxiety Disord*. Jun 2020;73:102239. [doi: [10.1016/j.janxdis.2020.102239](https://doi.org/10.1016/j.janxdis.2020.102239)] [Medline: [32502806](#)]

20. Shailaja B, Shetty V, Chaudhury S, Thyloth M. Exploring cyberchondria and its associations in dental students amid COVID-19 infodemic. *Ind Psychiatry J*. 2020;29(2):257-267. [doi: [10.4103/ijp.ipj_212_20](https://doi.org/10.4103/ijp.ipj_212_20)]

21. Arsenakis S, Chatton A, Penzenstadler L, et al. Unveiling the relationships between cyberchondria and psychopathological symptoms. *J Psychiatr Res*. Nov 2021;143:254-261. [doi: [10.1016/j.jpsychires.2021.09.014](https://doi.org/10.1016/j.jpsychires.2021.09.014)] [Medline: [34509786](#)]

22. Khazaal Y, Chatton A, Rochat L, et al. Compulsive health-related internet use and cyberchondria. *Eur Addict Res*. 2021;27(1):58-66. [doi: [10.1159/000510922](https://doi.org/10.1159/000510922)] [Medline: [33120393](#)]

23. Bajcar B, Babiak J. Self-esteem and cyberchondria: the mediation effects of health anxiety and obsessive-compulsive symptoms in a community sample. *Curr Psychol*. Jun 2021;40(6):2820-2831. [doi: [10.1007/s12144-019-00216-x](https://doi.org/10.1007/s12144-019-00216-x)]

24. Oniszczenko W. Anxious temperament and cyberchondria as mediated by fear of COVID-19 infection: a cross-sectional study. *PLoS ONE*. 2021;16(8):e0255750. [doi: [10.1371/journal.pone.0255750](https://doi.org/10.1371/journal.pone.0255750)] [Medline: [34352033](#)]

25. Köse S, Murat M. Examination of the relationship between smartphone addiction and cyberchondria in adolescents. *Arch Psychiatr Nurs*. Dec 2021;35(6):563-570. [doi: [10.1016/j.apnu.2021.08.009](https://doi.org/10.1016/j.apnu.2021.08.009)] [Medline: [34861946](#)]

26. Maftei A, Holman A. Better once it's over, worse now: prospective moral behaviors after the coronavirus epidemic and cyberchondria. *Psihologija*. 2021;54(2):193-205. [doi: [10.2298/PSI200603033M](https://doi.org/10.2298/PSI200603033M)]

27. Rahme C, Akel M, Obeid S, Hallit S. Cyberchondria severity and quality of life among Lebanese adults: the mediating role of fear of COVID-19, depression, anxiety, stress and obsessive-compulsive behavior-a structural equation model approach. *BMC Psychol*. Oct 29, 2021;9(1):169. [doi: [10.1186/s40359-021-00674-8](https://doi.org/10.1186/s40359-021-00674-8)] [Medline: [34715930](#)]

28. Peng XQ, Chen Y, Zhang YC, et al. The status and influencing factors of cyberchondria during the COVID-19 epidemic. A cross-sectional study in Nanyang City of China. *Front Psychol*. 2021;12:712703. [doi: [10.3389/fpsyg.2021.712703](https://doi.org/10.3389/fpsyg.2021.712703)] [Medline: [34858254](#)]

29. Vismara M, Vitella D, Biolcati R, et al. The impact of COVID-19 pandemic on searching for health-related information and cyberchondria on the general population in Italy. *Front Psychiatry*. 2021;12:754870. [doi: [10.3389/fpsyg.2021.754870](https://doi.org/10.3389/fpsyg.2021.754870)] [Medline: [34712159](#)]

30. Wu X, Nazari N, Griffiths MD. Using fear and anxiety related to COVID-19 to predict cyberchondria: cross-sectional survey study. *J Med Internet Res*. Jun 9, 2021;23(6):e26285. [doi: [10.2196/26285](https://doi.org/10.2196/26285)] [Medline: [34014833](#)]

31. Yam FC, Korkmaz O, Griffiths MD. The association between fear of COVID-19 and smartphone addiction among individuals: the mediating and moderating role of cyberchondria severity. *Curr Psychol*. 2023;42(3):2377-2390. [doi: [10.1007/s12144-021-02324-z](https://doi.org/10.1007/s12144-021-02324-z)] [Medline: [34690474](#)]

32. Bala R, Srivastava A, Ningthoujam GD, Potsangbam T, Oinam A, Anal CL. An observational study in Manipur state, India on preventive behavior influenced by social media during the COVID-19 pandemic mediated by cyberchondria and information overload. *J Prev Med Public Health*. Jan 2021;54(1):22-30. [doi: [10.3961/jpmph.20.465](https://doi.org/10.3961/jpmph.20.465)] [Medline: [33618496](#)]

33. Durak Batığın A, Şenkal Ertürk İ, Gör N, Kömürcü Akik B. The pathways from distress tolerance to cyberchondria: a multiple-group path model of young and middle adulthood samples. *Curr Psychol*. 2021;40(11):5718-5726. [doi: [10.1007/s12144-020-01038-y](https://doi.org/10.1007/s12144-020-01038-y)] [Medline: [32921966](#)]

34. Han L, Zhan Y, Li W, Xu Y, Xu Y, Zhao J. Associations between the perceived severity of the COVID-19 pandemic, cyberchondria, depression, anxiety, stress, and lockdown experience: cross-sectional survey study. *JMIR Public Health Surveill*. Sep 16, 2021;7(9):e31052. [doi: [10.2196/31052](https://doi.org/10.2196/31052)] [Medline: [34478402](#)]

35. Zhou Y, Dai L, Deng Y, Zeng H, Yang L. The moderating effect of alexithymia on the relationship between stress and cyberchondria. *Front Psychiatry*. 2022;13:1043521. [doi: [10.3389/fpsyg.2022.1043521](https://doi.org/10.3389/fpsyg.2022.1043521)]

36. Airolidi S, Kolubinski DC, Nikčević AV, Spada MM. The relative contribution of health cognitions and metacognitions about health anxiety to cyberchondria: a prospective study. *J Clin Psychol*. May 2022;78(5):809-820. [doi: [10.1002/jclp.23252](https://doi.org/10.1002/jclp.23252)] [Medline: [34559886](#)]

37. Bottesi G, Marino C, Vieno A, Ghisi M, Spada MM. Psychological distress in the context of the COVID-19 pandemic: the joint contribution of intolerance of uncertainty and cyberchondria. *Psychol Health*. Nov 2, 2022;37(11):1396-1413. [doi: [10.1080/08870446.2021.1952584](https://doi.org/10.1080/08870446.2021.1952584)]

38. Vismara M, Benatti B, Ferrara L, et al. A preliminary investigation of cyberchondria and its correlates in a clinical sample of patients with obsessive-compulsive disorder, anxiety and depressive disorders attending a tertiary psychiatric

clinic. *Int J Psychiatry Clin Pract.* Jun 2022;26(2):111-122. [doi: [10.1080/13651501.2021.1927107](https://doi.org/10.1080/13651501.2021.1927107)] [Medline: [34032529](#)]

39. Ciulkowicz M, Misiak B, Szcześniak D, Grzebieluch J, Maciaszek J, Rymaszewska J. The portrait of cyberchondria-a cross-sectional online study on factors related to health anxiety and cyberchondria in Polish population during SARS-CoV-2 pandemic. *Int J Environ Res Public Health.* Apr 5, 2022;19(7):4347. [doi: [10.3390/ijerph19074347](https://doi.org/10.3390/ijerph19074347)] [Medline: [35410027](#)]

40. Serra-Negra JM, Paiva SM, Baptista AS, Cruz AJ, Pinho T, Abreu MH. Cyberchondria and associated factors among Brazilian and Portuguese dentists. *Acta Odontol Latinoam.* Apr 30, 2022;35(1):45-50. [doi: [10.54589/aol.35/1/45](https://doi.org/10.54589/aol.35/1/45)] [Medline: [35700541](#)]

41. Demirtas Z, Emiral GO, Caliskan S, et al. Evaluation of relationship between cyberchondria and obsessive beliefs in adults. *P R Health Sci J.* Dec 2022;41(4):233-238. URL: <https://pubmed.ncbi.nlm.nih.gov/36516210/> [Accessed 2025-05-25] [Medline: [36516210](#)]

42. Karakaş N, Tekin Ç, Bentli R, Demir E. Cyberchondria, COVID-19 phobia, and well-being: a relational study on teachers. *Med Lav.* Jun 28, 2022;113(3):e2022027. [doi: [10.23749/mdl.v113i3.12661](https://doi.org/10.23749/mdl.v113i3.12661)] [Medline: [35766648](#)]

43. Kılıçaslan AK, Yıldız S, Gür C C, Uğur K. Cyberchondria and health anxiety in patients with fibromyalgia. *Arch Psych Psych.* 2022;24(4):16-25. [doi: [10.12740/APP/150478](https://doi.org/10.12740/APP/150478)]

44. Özkan O, Sungur C, Özer Ö. Investigation of cyberchondria level and digital literacy on women in Turkey. *J Hum Behav Soc Environ.* Aug 18, 2022;32(6):768-780. [doi: [10.1080/10911359.2021.1962776](https://doi.org/10.1080/10911359.2021.1962776)]

45. Sezer Ö, Başoğlu MA, Dağdeviren HN. An examination of cyberchondria's relationship with trait anxiety and psychological well-being in women of reproductive age: a cross-sectional study. *Medicine (Baltimore).* Nov 18, 2022;101(46):e31503. [doi: [10.1097/MD.00000000000031503](https://doi.org/10.1097/MD.00000000000031503)] [Medline: [36401487](#)]

46. Uysal Toraman A, Kalkim A, Korkmaz EK. Coronavirus anxiety and cyberchondria among teachers during the COVID-19 pandemic: an online survey. *Curr Psychol.* Apr 2024;43(14):13219-13225. [doi: [10.1007/s12144-022-03382-7](https://doi.org/10.1007/s12144-022-03382-7)]

47. Nadeem F, Malik NI, Atta M, et al. Relationship between health-anxiety and cyberchondria: role of metacognitive beliefs. *J Clin Med.* May 5, 2022;11(9):2590. [doi: [10.3390/jcm11092590](https://doi.org/10.3390/jcm11092590)] [Medline: [35566713](#)]

48. Sohail M, Zafar N. Fear of COVID-19 and stress in university students: mediating role of cyberchondria and moderating role of creative coping and social supports. *J Pak Med Assoc.* Aug 1, 2022;72(8):1564-1571. [doi: [10.47391/JPMA.4350](https://doi.org/10.47391/JPMA.4350)]

49. Turhan Cakir A. Cyberchondria levels in women with human papilloma virus. *J Obstet Gynaecol Res.* Oct 2022;48(10):2610-2614. [doi: [10.1111/jog.15354](https://doi.org/10.1111/jog.15354)] [Medline: [35801694](#)]

50. Liu S, Yang H, Cheng M, Miao T. Family dysfunction and cyberchondria among Chinese adolescents: a moderated mediation model. *Int J Environ Res Public Health.* Aug 7, 2022;19(15):9716. [doi: [10.3390/ijerph19159716](https://doi.org/10.3390/ijerph19159716)] [Medline: [35955070](#)]

51. Ambrosini F, Truzoli R, Vismara M, Vitella D, Biolcati R. The effect of cyberchondria on anxiety, depression and quality of life during COVID-19: the mediational role of obsessive-compulsive symptoms and Internet addiction. *Heliyon.* May 2022;8(5):e09437. [doi: [10.1016/j.heliyon.2022.e09437](https://doi.org/10.1016/j.heliyon.2022.e09437)] [Medline: [35600442](#)]

52. Santoro G, Starcevic V, Scalzone A, Cavallo J, Musetti A, Schimmenti A. The doctor is in(ternet): the mediating role of health anxiety in the relationship between somatic symptoms and cyberchondria. *J Pers Med.* Sep 12, 2022;12(9):1490. [doi: [10.3390/jpm12091490](https://doi.org/10.3390/jpm12091490)] [Medline: [36143275](#)]

53. Ahorsu DK, Lin CY, Alimoradi Z, et al. Cyberchondria, fear of COVID-19, and risk perception mediate the association between problematic social media use and intention to get a COVID-19 vaccine. *Vaccines (Basel).* Jan 14, 2022;10(1):122. [doi: [10.3390/vaccines10010122](https://doi.org/10.3390/vaccines10010122)] [Medline: [35062783](#)]

54. Błachnio A, Przepiórka A, Kot P, Cudo A, Steuden S. The role of emotional functioning in the relationship between health anxiety and cyberchondria. *Curr Psychol.* Dec 2023;42(35):31240-31250. [doi: [10.1007/s12144-022-04126-3](https://doi.org/10.1007/s12144-022-04126-3)]

55. Zolotareva A. Cyberchondria, but not preventive behavior, mediates the relationship between fear of COVID-19 and somatic burden: evidence from Russia. *Front Psychiatry.* 2022;13:1018659. [doi: [10.3389/fpsyg.2022.1018659](https://doi.org/10.3389/fpsyg.2022.1018659)] [Medline: [36226097](#)]

56. Vujić A, Dinić BM, Jokić-begić N. Cyberchondria and questionable health practices: the mediation role of conspiracy mentality. *SP.* Mar 16, 2022;64(1):104-117. [doi: [10.31577/sp.2022.01.842](https://doi.org/10.31577/sp.2022.01.842)]

57. Arnáez S, García-Soriano G, Castro J, Berle D, Starcevic V. The Spanish version of the short form of the Cyberchondria Severity Scale (CSS-12): testing the factor structure and measurement invariance across genders. *Curr Psychol.* Aug 2023;42(24):20686-20695. [doi: [10.1007/s12144-022-03170-3](https://doi.org/10.1007/s12144-022-03170-3)]

58. Boysan M, Eşkisu M, Çam Z. Relationships between fear of COVID-19, cyberchondria, intolerance of uncertainty, and obsessional probabilistic inferences: a structural equation model. *Scand J Psychol.* Oct 2022;63(5):439-448. [doi: [10.1111/sjop.12822](https://doi.org/10.1111/sjop.12822)] [Medline: [35430750](#)]

59. Varer Akpinar C, Mandiracioglu A, Ozvermaz S, Kurt F, Koc N. Cyberchondria and COVID-19 anxiety and internet addiction among nursing students. *Curr Psychol*. 2023;42(3):2406-2414. [doi: [10.1007/s12144-022-04057-z](https://doi.org/10.1007/s12144-022-04057-z)] [Medline: [36468163](https://pubmed.ncbi.nlm.nih.gov/36468163/)]

60. Yalçın İ, Boysan M, Eşkisu M, Çam Z. Health anxiety model of cyberchondria, fears, obsessions, sleep quality, and negative affect during COVID-19. *Curr Psychol*. Mar 2024;43(9):8502-8519. [doi: [10.1007/s12144-022-02987-2](https://doi.org/10.1007/s12144-022-02987-2)]

61. Daniali M, Eskandari E. Predicting coronavirus anxiety based on resilience, cognitive emotion regulation strategies, and cyberchondria. *Advance Cogn Sci*. Jan 10, 2022;23(4):61-71. URL: https://icssjournal.ir/browse.php?a_id=1261&sid=1&slc_lang=en [Accessed 2025-05-25] [doi: [10.30514/icss.23.4.61](https://doi.org/10.30514/icss.23.4.61)]

62. Mrayyan MT, AL-Atiyat N, Abu Khait A, Al-Rawashdeh S, Algunmeeyn A, Abunab HY. Does cyberchondria predict Internet addiction among students during the COVID-19 pandemic? A web-based survey study. *Nurs Forum*. May 2022;57(3):337-343. [doi: [10.1111/nuf.12682](https://doi.org/10.1111/nuf.12682)]

63. Nicolai J, Moshagen M, Schillings K, Erdfelder E. The role of base-rate neglect in cyberchondria and health anxiety. *J Anxiety Disord*. Oct 2022;91:102609. [doi: [10.1016/j.janxdis.2022.102609](https://doi.org/10.1016/j.janxdis.2022.102609)] [Medline: [35963146](https://pubmed.ncbi.nlm.nih.gov/35963146/)]

64. Honora A, Wang KY, Chih WH. How does information overload about COVID-19 vaccines influence individuals' vaccination intentions? The roles of cyberchondria, perceived risk, and vaccine skepticism. *Comput Human Behav*. May 2022;130:107176. [doi: [10.1016/j.chb.2021.107176](https://doi.org/10.1016/j.chb.2021.107176)] [Medline: [35013641](https://pubmed.ncbi.nlm.nih.gov/35013641/)]

65. Durmuş A, Deniz S, Akbolat M, Çimen M. Does cyberchondria mediate the effect of COVID-19 fear on the stress? *Soc Work Public Health*. May 19, 2022;37(4):356-369. [doi: [10.1080/19371918.2021.2014013](https://doi.org/10.1080/19371918.2021.2014013)] [Medline: [35100946](https://pubmed.ncbi.nlm.nih.gov/35100946/)]

66. Kurcer MA, Erdogan Z, Cakir Kardes V. The effect of the COVID-19 pandemic on health anxiety and cyberchondria levels of university students. *Perspect Psychiatric Care*. Jan 2022;58(1):132-140. [doi: [10.1111/ppc.12850](https://doi.org/10.1111/ppc.12850)]

67. Abu Khait A, Mrayyan MT, Al-Rjoub S, Rababa M, Al-Rawashdeh S. Cyberchondria, anxiety sensitivity, hypochondria, and internet addiction: implications for mental health professionals. *Curr Psychol*. Nov 2023;42(31):27141-27152. [doi: [10.1007/s12144-022-03815-3](https://doi.org/10.1007/s12144-022-03815-3)]

68. Li J. Impact of metaverse cultural communication on the mental health of international students in China: highlighting effects of healthcare anxiety and cyberchondria. *Am J Health Behav*. Dec 30, 2022;46(6):809-820. [doi: [10.5993/AJHB.46.6.21](https://doi.org/10.5993/AJHB.46.6.21)] [Medline: [36721290](https://pubmed.ncbi.nlm.nih.gov/36721290/)]

69. Patanapu SK, Sreeja CS, Veeraboina N, Reddy KV, Voruganti S, Anusha P. Prevalence and effect of cyberchondria on academic performance among undergraduate dental students: an institutional based study. *Ind Psychiatry J*. 2022;31(2):228-234. [doi: [10.4103/ijp.ipj_272_21](https://doi.org/10.4103/ijp.ipj_272_21)] [Medline: [36419676](https://pubmed.ncbi.nlm.nih.gov/36419676/)]

70. Pawar P, Kamat A, Salimath G, Jacob KR, Kamath R. Prevalence of cyberchondria among outpatients with metabolic syndrome in a tertiary care hospital in southern India. *ScientificWorldJournal*. 2022;2022(1):3211501. [doi: [10.1155/2022/3211501](https://doi.org/10.1155/2022/3211501)] [Medline: [36199439](https://pubmed.ncbi.nlm.nih.gov/36199439/)]

71. Yuan W. Identifying the effect of digital healthcare products in metaverse on mental health: studying the interaction of cyberchondria and technophobia. *Am J Health Behav*. Dec 30, 2022;46(6):729-739. [doi: [10.5993/AJHB.46.6.15](https://doi.org/10.5993/AJHB.46.6.15)] [Medline: [36721275](https://pubmed.ncbi.nlm.nih.gov/36721275/)]

72. Zheng H, Jiang S. Linking the pathway from exposure to online vaccine information to cyberchondria during the COVID-19 pandemic: a moderated mediation model. *Cyberpsychol Behav Soc Netw*. Oct 2022;25(10):625-633. [doi: [10.1089/cyber.2022.0045](https://doi.org/10.1089/cyber.2022.0045)] [Medline: [36037024](https://pubmed.ncbi.nlm.nih.gov/36037024/)]

73. Afrin R, Prybutok G. Insights into the antecedents of cyberchondria: a perspective from the USA. *Health Promot Int*. Aug 1, 2022;37(4):daac108. [doi: [10.1093/heapro/daac108](https://doi.org/10.1093/heapro/daac108)] [Medline: [36047641](https://pubmed.ncbi.nlm.nih.gov/36047641/)]

74. Wang D, Sun L, Shao Y, Zhang X, Maguire P, Hu Y. Research and evaluation of a cyberchondria severity scale in a Chinese context. *Psychol Res Behav Manag*. 2023;16:4417-4429. [doi: [10.2147/PRBM.S431470](https://doi.org/10.2147/PRBM.S431470)] [Medline: [37936970](https://pubmed.ncbi.nlm.nih.gov/37936970/)]

75. Nasiri M, Mohammadkhani S, Akbari M, Alilou MM. The structural model of cyberchondria based on personality traits, health-related metacognition, cognitive bias, and emotion dysregulation. *Front Psychiatry*. 2022;13:960055. [doi: [10.3389/fpsyg.2022.960055](https://doi.org/10.3389/fpsyg.2022.960055)] [Medline: [36699479](https://pubmed.ncbi.nlm.nih.gov/36699479/)]

76. Aydin Kartal Y, Kaya L, Özcan H. Investigation of the relationship between depression, cyberchondria levels and the quality of life of female students during the COVID-19 pandemic. *Women Health*. Sep 14, 2023;63(8):669-680. [doi: [10.1080/03630242.2023.2255312](https://doi.org/10.1080/03630242.2023.2255312)]

77. Sayar SE, Demet Ust Tasgin Z, Gundogdu G. The relationship between fear of COVID-19 and levels of cyberchondria and evaluation of affecting factors. *Psychiatr Danub*. Oct 23, 2023;35(3):418-429. [doi: [10.24869/psyd.2023.418](https://doi.org/10.24869/psyd.2023.418)]

78. Özer Ö, Özmen S, Özkan O. Investigation of the effect of cyberchondria behavior on e-health literacy in healthcare workers. *Hosp Top*. 2023;101(2):94-102. [doi: [10.1080/00185868.2021.1969873](https://doi.org/10.1080/00185868.2021.1969873)] [Medline: [34461810](https://pubmed.ncbi.nlm.nih.gov/34461810/)]

79. Üzüm Ö, Ince G, Eliaçik K, Kanık A, Elmalı F, Helvacı M. Investigating the potential connection between cyberchondria and vaccine hesitancy in high school students. *Cureus*. Jan 2023;15(1):e34218. [doi: [10.7759/cureus.34218](https://doi.org/10.7759/cureus.34218)] [Medline: [36852372](https://pubmed.ncbi.nlm.nih.gov/36852372/)]

80. El-Zayat A, Namnkani SA, Alshareef NA, Mustfa MM, Eminaga NS, Algarni GA. Cyberchondria and its association with smartphone addiction and electronic health literacy among a Saudi population. *Saudi J Med Med Sci*. 2023;11(2):162-168. [doi: [10.4103/sjmms.sjmms_491_22](https://doi.org/10.4103/sjmms.sjmms_491_22)] [Medline: [37252023](https://pubmed.ncbi.nlm.nih.gov/37252023/)]

81. Hallit S, Rogoza R, Abi Semaan C, Azzi V, Sawma T, Obeid S. Validation of the Arabic version of the cyberchondria severity scale 12 items (CSS-12-Ar) among a sample of Lebanese adults. *BMC Psychiatry*. Aug 23, 2023;23(1):618. [doi: [10.1186/s12888-023-05123-x](https://doi.org/10.1186/s12888-023-05123-x)]

82. Tarabay C, Bitar Z, Akel M, Hallit S, Obeid S, Soufia M. Cyberchondria severity and quality of life among Lebanese adults: the moderating effect of emotions. *Prim Care Companion CNS Disord*. Apr 27, 2023;25(2):46791. [doi: [10.4088/PCC.22m03252](https://doi.org/10.4088/PCC.22m03252)] [Medline: [37115149](https://pubmed.ncbi.nlm.nih.gov/37115149/)]

83. Zhu X, Zheng T, Ding L, Zhang X. Exploring associations between eHealth literacy, cyberchondria, online health information seeking and sleep quality among university students: a cross-section study. *Heliyon*. Jun 2023;9(6):e17521. [doi: [10.1016/j.heliyon.2023.e17521](https://doi.org/10.1016/j.heliyon.2023.e17521)]

84. Sabir S, Naqvi I. Prevalence of cyberchondria among university students: an emerging challenge of the 21st century. *J Pak Med Assoc*. Aug 2023;73(8):1634-1639. [doi: [10.47391/JPMA.7771](https://doi.org/10.47391/JPMA.7771)] [Medline: [37697754](https://pubmed.ncbi.nlm.nih.gov/37697754/)]

85. Infanti A, Starcevic V, Schimmenti A, et al. Predictors of cyberchondria during the COVID-19 pandemic: cross-sectional study using supervised machine learning. *JMIR Form Res*. Apr 25, 2023;7(1):e42206. [doi: [10.2196/42206](https://doi.org/10.2196/42206)] [Medline: [36947575](https://pubmed.ncbi.nlm.nih.gov/36947575/)]

86. Robles-Mariños R, Alvarado GF, Maguña JL, Bazo-Alvarez JC. The short-form of the Cyberchondria Severity Scale (CSS-12): adaptation and validation of the Spanish version in young Peruvian students. *PLoS ONE*. 2023;18(10):e0292459. [doi: [10.1371/journal.pone.0292459](https://doi.org/10.1371/journal.pone.0292459)] [Medline: [37796833](https://pubmed.ncbi.nlm.nih.gov/37796833/)]

87. Yıldız M, Demirhan A, Gökçay G, Polat F. The relationship between cyberchondria levels, attitudes towards menopause and menopausal complaints of women in the climacteric period: analysis with data mining. *Womens Stud Int Forum*. May 2023;98:102701. [doi: [10.1016/j.wsif.2023.102701](https://doi.org/10.1016/j.wsif.2023.102701)]

88. Błachnio A, Przepiórka A, Kot P, Cudo A, McElroy E. The mediating role of rumination between stress appraisal and cyberchondria. *Acta Psychol (Amst)*. Aug 2023;238:103946. [doi: [10.1016/j.actpsy.2023.103946](https://doi.org/10.1016/j.actpsy.2023.103946)] [Medline: [37499622](https://pubmed.ncbi.nlm.nih.gov/37499622/)]

89. Özken MS, Kılınç MT, Hamarat MB, et al. Digitalization and urological diseases: severity of cyberchondria and level of health anxiety in patients visiting outpatient urology clinics. *Cyberpsychol Behav Soc Netw*. Jan 2023;26(1):28-34. [doi: [10.1089/cyber.2022.0089](https://doi.org/10.1089/cyber.2022.0089)] [Medline: [36454182](https://pubmed.ncbi.nlm.nih.gov/36454182/)]

90. Liu Y, Peng W, Cao M, Zhang S, Peng J, Zhou Z. Cyberchondria and Chinese adolescent mental health in the age of COVID-19 pandemic. *Cyberpsychol Behav Soc Netw*. Aug 2023;26(8):631-639. [doi: [10.1089/cyber.2022.0319](https://doi.org/10.1089/cyber.2022.0319)] [Medline: [37406285](https://pubmed.ncbi.nlm.nih.gov/37406285/)]

91. Bagaric B, Martincevic M, Vranic A. What is remembered?: the recall of health-related information in cyberchondria and health anxiety. *Psihologija*. 2023;56(2):205-221. [doi: [10.2298/PSI220127019B](https://doi.org/10.2298/PSI220127019B)]

92. Šoštarić M, Mikac U, Jokić-Begić N. Understanding cyberchondria in pregnant women: longitudinal assessment of risk factors, triggers, and outcomes. *J Psychosom Obstet Gynecol*. Dec 31, 2023;44(1):2265050. [doi: [10.1080/0167482X.2023.2265050](https://doi.org/10.1080/0167482X.2023.2265050)]

93. Mrayyan MT, Alkhawaldeh JM, Alfayoumi I, et al. COVID-19 era-related e-learning: a cross-sectional web-scale study of cyberchondria, internet addiction and anxiety-related symptomatology among university nursing students. *BMJ Open*. Aug 9, 2023;13(8):e071971. [doi: [10.1136/bmjopen-2023-071971](https://doi.org/10.1136/bmjopen-2023-071971)] [Medline: [37558438](https://pubmed.ncbi.nlm.nih.gov/37558438/)]

94. Jeong GC, Lee K, Jin Y. Effects of the fear of COVID-19 and efficacy of coping behavior for infectious diseases after the end of COVID-19: moderating effects of cyberchondria and eHealth literacy. *Behav Sci (Basel)*. Aug 8, 2023;13(8):663. [doi: [10.3390/bs13080663](https://doi.org/10.3390/bs13080663)] [Medline: [37622803](https://pubmed.ncbi.nlm.nih.gov/37622803/)]

95. Vujić A, Volarov M, Latas M, Demetrovics Z, Kiraly O, Szabo A. Are cyberchondria and intolerance of uncertainty related to smartphone addiction? *Int J Ment Health Addiction*. Dec 2024;22(6):3361-3379. [doi: [10.1007/s11469-023-01054-6](https://doi.org/10.1007/s11469-023-01054-6)]

96. Ustuner Top F, Çevik C, Bora Güneş N. The relation between digital literacy, cyberchondria, and parents' attitudes to childhood vaccines. *J Pediatr Nurs*. May 2023;70:12-19. [doi: [10.1016/j.pedn.2023.01.006](https://doi.org/10.1016/j.pedn.2023.01.006)]

97. Abikoye GE, Lawal AM. Prevalence and psychosocial predictors of cyberchondria in Nigeria during the COVID-19 pandemic. *Int J Cyber Behav Psychol Learn*. Jan 2023;13(1):1-12. URL: <https://www.igi-global.com/gateway/article/324088> [doi: [10.4018/IJCBPL.324088](https://doi.org/10.4018/IJCBPL.324088)]

98. Satyarup D, Panda S, Nagarajappa R, Mohapatra U. Cyberchondria among information technology professionals of Bhubaneswar by using cyberchondria severity scale (CSS-15). *Rocz Panstw Zakl Hig*. 2023;74(1):83-91. [doi: [10.32394/rpzh.2023.0241](https://doi.org/10.32394/rpzh.2023.0241)] [Medline: [37013889](https://pubmed.ncbi.nlm.nih.gov/37013889/)]

99. Shahani R, Asmi F, Ma J, et al. How cyberchondria and decision self-efficacy shapes the acceptability of COVID-19 vaccine: a gender-based comparison. *Digit Health*. 2023;9:20552076231185430. [doi: [10.1177/20552076231185430](https://doi.org/10.1177/20552076231185430)] [Medline: [37744744](https://pubmed.ncbi.nlm.nih.gov/37744744/)]

100. Staraj Bajcic T, Sorta-Bilajac Turina I, Lucijanic M, Sinozic T, Vuckovic M, Bazdaric K. Cyberchondria, health literacy, and perception of risk in Croatian patients with risk of sexually transmitted infections and HIV-A cross-sectional study. *Epidemiologia (Basel)*. Aug 22, 2024;5(3):525-538. [doi: [10.3390/epidemiologia5030036](https://doi.org/10.3390/epidemiologia5030036)] [Medline: [39311353](https://pubmed.ncbi.nlm.nih.gov/39311353/)]
101. Jungmann SM, Gropalis M, Schenkel SK, Witthöft M. Is cyberchondria specific to hypochondriasis? *J Anxiety Disord*. Mar 2024;102:102798. [doi: [10.1016/j.janxdis.2023.102798](https://doi.org/10.1016/j.janxdis.2023.102798)] [Medline: [38128287](https://pubmed.ncbi.nlm.nih.gov/38128287/)]
102. Jędrzejewska AB, Nowicki GJ, Rudnicka-Drożak E, Panasiuk L, Ślusarska BJ. Association between cyberchondria and the use of complementary and alternative medicine (CAM) - a cross-sectional study. *Ann Agric Environ Med*. Mar 25, 2024;31(1):87-93. [doi: [10.26444/aaem/178503](https://doi.org/10.26444/aaem/178503)] [Medline: [38549481](https://pubmed.ncbi.nlm.nih.gov/38549481/)]
103. Kobryń M, Duplaga M. Does health literacy protect against cyberchondria: a cross-sectional study? *Telemed J E Health*. Apr 2024;30(4):e1089-e1100. [doi: [10.1089/tmj.2023.0425](https://doi.org/10.1089/tmj.2023.0425)] [Medline: [38016126](https://pubmed.ncbi.nlm.nih.gov/38016126/)]
104. Kobryń M, Duplaga M. Cyberchondria severity and utilization of health services in Polish society: a cross-sectional study. *BMC Public Health*. Mar 27, 2024;24(1):902. [doi: [10.1186/s12889-024-18399-9](https://doi.org/10.1186/s12889-024-18399-9)] [Medline: [38539164](https://pubmed.ncbi.nlm.nih.gov/38539164/)]
105. Atsizata M, Sögüt SC. The relationship between orthorexia nervosa and cyberchondria levels in nurses: a cross-sectional study. *Arch Psychiatr Nurs*. Feb 2024;48:30-35. [doi: [10.1016/j.apnu.2024.01.008](https://doi.org/10.1016/j.apnu.2024.01.008)] [Medline: [38453279](https://pubmed.ncbi.nlm.nih.gov/38453279/)]
106. Bahadir O, Dundar C. The impact of online health information source preference on intolerance to uncertainty and cyberchondria in a youthful generation. *Indian J Psychiatry*. Apr 2024;66(4):360-366. [doi: [10.4103/indianjpsychiatry.indianjpsychiatry_715_23](https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_715_23)] [Medline: [38778859](https://pubmed.ncbi.nlm.nih.gov/38778859/)]
107. Topkara Sucu S, Kolomuç Gayretli T, Küçükayıkçı AS, et al. Cyberchondria levels in adolescent patients with polycystic ovary syndrome in the digital age. *J Pediatr Adolesc Gynecol*. Dec 2024;37(6):569-573. [doi: [10.1016/j.jpag.2024.08.006](https://doi.org/10.1016/j.jpag.2024.08.006)] [Medline: [39168278](https://pubmed.ncbi.nlm.nih.gov/39168278/)]
108. Fang J, Qiu C, Sun Z, et al. A national survey of pandemic fear and cyberchondria after ending zero-COVID policy: the chain mediating role of alexithymia and psychological distress. *Compr Psychiatry*. Aug 2024;133:152505. [doi: [10.1016/j.comppsych.2024.152505](https://doi.org/10.1016/j.comppsych.2024.152505)] [Medline: [38852302](https://pubmed.ncbi.nlm.nih.gov/38852302/)]
109. Li Y, Li J, Zhou C, et al. Unraveling the relationships among pandemic fear, cyberchondria, and alexithymia after China's exit from the zero-COVID policy: insights from a multi-center network analysis. *Front Psychiatry*. Nov 14, 2024;15:1489961. [doi: [10.3389/fpsyg.2024.1489961](https://doi.org/10.3389/fpsyg.2024.1489961)]
110. Xu RH, Chen C. Moderating effect of coping strategies on the association between the infodemic-driven overuse of health care services and cyberchondria and anxiety: partial least squares structural equation modeling study. *J Med Internet Res*. Apr 9, 2024;26:e53417. [doi: [10.2196/53417](https://doi.org/10.2196/53417)] [Medline: [38593427](https://pubmed.ncbi.nlm.nih.gov/38593427/)]
111. Agrawal V, Khulbe Y, Singh A, Kar SK. The digital health dilemma: exploring cyberchondria, well-being, and smartphone addiction in medical and non-medical undergraduates. *Indian J Psychiatry*. Mar 2024;66(3):256-262. [doi: [10.4103/indianjpsychiatry.indianjpsychiatry_570_23](https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_570_23)] [Medline: [39100122](https://pubmed.ncbi.nlm.nih.gov/39100122/)]
112. Ali SS, Hendawi NE, El-Ashry AM, Mohammed MS. The relationship between cyberchondria and health literacy among first-year nursing students: the mediating effect of health anxiety. *BMC Nurs*. Oct 22, 2024;23(1):776. [doi: [10.1186/s12912-024-02396-9](https://doi.org/10.1186/s12912-024-02396-9)] [Medline: [39434055](https://pubmed.ncbi.nlm.nih.gov/39434055/)]
113. El-Zoghby SM, Zaghloul NM, Tawfik AM, Elsherbiny NM, Shehata SA, Soltan EM. Cyberchondria and smartphone addiction: a correlation survey among undergraduate medical students in Egypt. *J Egypt Public Health Assoc*. Apr 3, 2024;99(1):7. [doi: [10.1186/s42506-024-00154-y](https://doi.org/10.1186/s42506-024-00154-y)] [Medline: [38565743](https://pubmed.ncbi.nlm.nih.gov/38565743/)]
114. Eşkisu M, Çam Z, Boysan M. Health-related cognitions and metacognitions indirectly contribute to the relationships between impulsivity, fear of COVID-19, and cyberchondria. *J Rat Emo Cognitive Behav Ther*. Mar 2024;42(1):110-132. [doi: [10.1007/s10942-022-00495-7](https://doi.org/10.1007/s10942-022-00495-7)]
115. Fang S, Mushtaque I. The moderating role of health literacy and health promoting behavior in the relationship among health anxiety, emotional regulation, and cyberchondria. *Psychol Res Behav Manag*. 2024;17:51-62. [doi: [10.2147/PRBM.S446448](https://doi.org/10.2147/PRBM.S446448)] [Medline: [38196775](https://pubmed.ncbi.nlm.nih.gov/38196775/)]
116. Sansakorn P, Mushtaque I, Awais-E-Yazdan M, Dost MK. The relationship between cyberchondria and health anxiety and the moderating role of health literacy among the Pakistani public. *Int J Environ Res Public Health*. Sep 2, 2024;21(9):1168. [doi: [10.3390/ijerph21091168](https://doi.org/10.3390/ijerph21091168)] [Medline: [39338051](https://pubmed.ncbi.nlm.nih.gov/39338051/)]
117. Bin Abdulrahman KA, AL Musfir SK, Alforaih AS, Alshehri AM, Aldossari AK, Dawood FDB. The prevalence of cyberchondria and the impact of skepticism on medical decisions among Imam Mohammed Ibn Saud Islamic University students, Riyadh, Saudi Arabia. *J Family Med Prim Care*. 2024;13(11):5334-5340. [doi: [10.4103/jfmpc.jfmpc_640_24](https://doi.org/10.4103/jfmpc.jfmpc_640_24)]
118. Šoštarić M, Jokić-Begić N, Vukušić Mijačika M. Can't stop, won't stop - understanding anxiety's role in cyberchondria among pregnant women. *Women Health*. Feb 7, 2024;64(2):185-194. [doi: [10.1080/03630242.2024.2308525](https://doi.org/10.1080/03630242.2024.2308525)] [Medline: [38258443](https://pubmed.ncbi.nlm.nih.gov/38258443/)]
119. Mrayyan MT, Abu Khait A, Al-Mrayat Y, et al. Anxiety sensitivity moderates the relationship between internet addiction and cyberchondria among nurses. *J Health Psychol*. Sep 2025;30(11):3125-3136. [doi: [10.1177/13591053241249634](https://doi.org/10.1177/13591053241249634)]

120. Guo Y, Wang Y, Li Y. Online health information seeking, health anxiety and cyberchondria among men who engage in sexual risk taking: the mediating role of medical consultation about HIV / AIDS. *Community Applied Soc Psy*. Jul 2024;34(4):e2845. URL: <https://onlinelibrary.wiley.com/toc/10991298/34/4> [doi: [10.1002/casp.2845](https://doi.org/10.1002/casp.2845)]

121. Zhang X, Zheng H, Zeng Y, Zou J, Zhao L. Exploring how health-related advertising interference contributes to the development of cyberchondria: a stressor-strain-outcome approach. *Digit Health*. 2024;10:20552076241233138. [doi: [10.1177/20552076241233138](https://doi.org/10.1177/20552076241233138)] [Medline: [38384368](#)]

122. Salkovskis PM, Warwick H. Making sense of hypochondriasis: a cognitive theory of health anxiety. In: Asmundson G, Taylor S, Cox BJ, editors. *Health Anxiety: Clinical and Research Perspectives on Hypochondriasis and Related Conditions*. Wiley; 2001:46-64. ISBN: 9780471491040

123. Norr AM, Allan NP, Boffa JW, Raines AM, Schmidt NB. Validation of the Cyberchondria Severity Scale (CSS): replication and extension with bifactor modeling. *J Anxiety Disord*. Apr 2015;31:58-64. [doi: [10.1016/j.janxdis.2015.02.001](https://doi.org/10.1016/j.janxdis.2015.02.001)] [Medline: [25734759](#)]

124. Starcevic V, Berle D. Cyberchondria: towards a better understanding of excessive health-related Internet use. *Expert Rev Neurother*. Feb 2013;13(2):205-213. [doi: [10.1586/ern.12.162](https://doi.org/10.1586/ern.12.162)] [Medline: [23368807](#)]

125. Wellcome Trust, Gallup. Wellcome Global Monitor 2020: how COVID-19 affected people's lives and their views about science. Wellcome Trust; 2021. URL: <https://cms.wellcome.org/sites/default/files/2021-11/Wellcome-Global-Monitor-Covid.pdf> [Accessed 2025-08-13]

126. Perlis RH, Ognyanova K, Uslu A, et al. Trust in physicians and hospitals during the COVID-19 pandemic in a 50-state survey of US adults. *JAMA Netw Open*. Jul 1, 2024;7(7):e2424984. [doi: [10.1001/jamanetworkopen.2024.24984](https://doi.org/10.1001/jamanetworkopen.2024.24984)] [Medline: [39083270](#)]

127. Bajcar B, Babiak J, Olchowska-Kotala A. Cyberchondria and its measurement. The Polish adaptation and psychometric properties of the Cyberchondria Severity Scale CSS-PL. *Psychiatr Pol*. 2019;53(1):49-60. [doi: [10.12740/PP/81799](https://doi.org/10.12740/PP/81799)]

128. Wangler J, Jansky M. General practitioners' challenges and strategies in dealing with Internet-related health anxieties—results of a qualitative study among primary care physicians in Germany. *Wien Med Wochenschr*. Oct 2020;170(13-14):329-339. [doi: [10.1007/s10354-020-00777-8](https://doi.org/10.1007/s10354-020-00777-8)]

129. Wangler J, Jansky M. Online enquiries and health concerns – a survey of German general practitioners regarding experiences and strategies in patient care. *J Public Health (Berl)*. Jul 2024;32(7):1243-1249. [doi: [10.1007/s10389-023-01909-1](https://doi.org/10.1007/s10389-023-01909-1)]

130. Gelso CJ, Kivlighan DM, Markin RD. The real relationship and its role in psychotherapy outcome: a meta-analysis. *Psychotherapy (Chic)*. Dec 2018;55(4):434-444. [doi: [10.1037/pst0000183](https://doi.org/10.1037/pst0000183)] [Medline: [30335456](#)]

131. Vismara M, Caricasole V, Starcevic V, et al. Is cyberchondria a new transdiagnostic digital compulsive syndrome? A systematic review of the evidence. *Compr Psychiatry*. May 2020;99:152167. [doi: [10.1016/j.comppsych.2020.152167](https://doi.org/10.1016/j.comppsych.2020.152167)] [Medline: [32146315](#)]

132. Laato S, Islam AKMN, Islam MN, Whelan E. What drives unverified information sharing and cyberchondria during the COVID-19 pandemic? *Eur J Inf Syst*. May 3, 2020;29(3):288-305. [doi: [10.1080/0960085X.2020.1770632](https://doi.org/10.1080/0960085X.2020.1770632)]

133. García-Saisó S, Martí M, Brooks I, et al. The COVID-19 Infodemic. *Rev Panam Salud Publica*. 2021;45:e56. [doi: [10.26633/RPSP.2021.56](https://doi.org/10.26633/RPSP.2021.56)] [Medline: [34234820](#)]

134. Pollack CE, Soullos PR, Herrin J, et al. The impact of social contagion on physician adoption of advanced imaging tests in breast cancer. *J Natl Cancer Inst*. Aug 1, 2017;109(8):djw330. [doi: [10.1093/jnci/djw330](https://doi.org/10.1093/jnci/djw330)] [Medline: [28376191](#)]

135. Perera KYS, Ranasinghe P, Adikari AMMC, Balagobi B, Constantine GR, Jayasinghe S. Medium of language in discharge summaries: would the use of native language improve patients' knowledge of their illness and medications? *J Health Commun*. 2012;17(2):141-148. [doi: [10.1080/10810730.2011.585926](https://doi.org/10.1080/10810730.2011.585926)] [Medline: [22112212](#)]

136. Al-Jarf RS. Multiple Arabic equivalents to English medical terms. *Int Linguist Res*. 2018;1(1):102. [doi: [10.30560/ilr.v1n1p102](https://doi.org/10.30560/ilr.v1n1p102)]

137. Chentsova-Dutton YE, Tsai JL. Understanding depression across cultures. In: Friedman ES, Anderson IM, editors. *Handbook of Depression*. 2nd ed. Guilford Press; 2009:363-385. ISBN: 9781908517241

Abbreviations

CSS: Cyberchondria Severity Scale

CSS-12: 12-item Cyberchondria Severity Scale

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

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