

ACCELERATED RESEARCH

Information overload regarding COVID-19: Adaptation and validation of the cancer information overload scale

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ABSTRACT

Background: Access to excessive information from multiple sources relating to COVID-19 in a short span of time can have detrimental effects on individuals.

Aim: The study aims to validate Corona Information Overload Scale (CoIOS) by adaptation of Cancer Information Overload scale (CIOS) on English speaking Indian citizens.

Materials and Methods: An online survey was carried out using Google Form on 300 individuals out of whom 183 responded. The CoIOS was to be filled up. It was an 8 item Likert type scale with responses ranging from “strongly agree” to “strongly disagree.”

Results: Principal components analysis showed two components with an initial eigenvalue > unity (3.38 and 1.09), with 42.33% and 13.64% of variance, respectively, making a total of 55.97% variance. The composite reliability value was also found to be 0.789 and 0.815 for factors I and II, respectively, convergent validity and discriminant validity calculation also affirmed good construct reliability.

Conclusion: CoIOS appears to be a valid and reliable scale for measuring health information overload in relation to COVID-19. However, it has a two factor component, namely “excessiveness of information” and “rejection of information.”

Key words: Corona information overload scale, COVID-19, information overload

INTRODUCTION

The Novel Coronavirus Disease (COVID-19) originated from Wuhan province in China in December 2019. It spread globally within months and the World Health


Organization (WHO) declared it a pandemic on March 11, 2020.^[1] As the disease gradually began to spread across various continents, fear and panic gripped the entire world. In this era of social media dominance and access to smartphone among billions, excessive, and varying information about COVID-19 became a major cause for panic. In fact, the WHO Director-General mentioned in February 15 at Munich Security Conference: We are not just fighting an epidemic; we are fighting an infodemic.^[2] India

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recorded its first case in January 30, 2020, and the Indian Government announced nationwide lockdown from March 25, 2020.^[1] With the advent of lockdown and majority of populace staying indoors, people spent much longer time in gathering information about the disease from all possible sources-websites, social media, newspapers, television channels, and even by word of mouth. Thus, access to too much information, often contrasting with each other, became a cause of concern for Indians just like people in other parts of the world.

Information overload refers to a situation where the volume of information supplied in a given time frame exceeds an individual's capacity to process information.^[3] When faced with such a predicament, an individual may either process information incorrectly, wrongly interpret information or avoid it completely. Studies in cancer information overload have shown that it can have negative consequences in terms of avoidance of screening measures and not following proper preventive measures.

The global impact of corona pandemic is unprecedented in world history. This is accompanied by a surge of ever-changing information and recommendations in a short span of time. It is necessary to study information overload in the population in terms of COVID-19-related information because similar to cancer information overload, it can also have adverse consequences like avoidance of help-seeking behavior which in turn can affect proper detection of the illness at the community level.

Information overload has previously been studied with the help of Cancer Information Overload Scale (CIOS) in patients with cancer.^[4] This scale has also been successfully adapted for studying information overload in patients with atrial fibrillation,^[5] information on healthy diet recommendations,^[6] and sun safe behavior.^[7] Since this is the only scale available for studying information overload in health conditions, we chose to adapt this scale for studying information overload in relation to COVID-19 pandemic. The aim of this study was to adapt and validate the 8-item CIOS for studying information overload in relation to COVID-19 among Indian citizens who could read and write in English.

MATERIALS AND METHODS

Participants

An online survey was carried out between May 26, 2020, and June 6, 2020, through Google Forms. The Institutional Ethics Committee approved the study. Each of the investigators sent the link through text messages or WhatsApp (never by both means in case of the same individual, in order to prevent inadvertent duplicate response) to 75 of their known contacts. The WhatsApp links were sent to personal inbox of the contacts and never in groups. The participants were instructed not to forward the link to others and to

provide a single response only. The contacts were chosen to ensure proportional representation as far as possible in terms of various professions, age groups, and both sexes. Thus, we sent the link to a total of 300 respondents. The minimum number of intended subjects in whom the scale needs to be validated is usually taken as 10 times the number of items of the scale.^[8] Thus, the CIOS, which is an 8-item measure, required a minimum sample size of 80 for validation. Assuming a response rate of approximately 50%, we could achieve a sample size of 150, which would be well above our minimum requirement of 80.

Tools

The questionnaire was prepared as a Google Form. It consisted of a set of questions related to socio-economic and clinical variables such as age, sex, education, occupation, religion, and sources from which information was regularly gathered regarding COVID-19 and screen time of the subjects. The name and E-mail addresses were not kept as mandatory fields to ensure confidentiality. Prior to filling up of the form, there was a clear statement that participation in the study by filling up the form would imply that the individual had provided his consent for the same. After the socio-demographic questionnaire, the participants had to answer the 8-item "Corona Information Overload Scale" (CoIOS). The scale was adapted from the previously validated "Cancer Information Overload Scale" (CIOS) which is an 8-item Likert type scale which asks various questions related to information overload in cancer patients. The responses are provided on a 4-point Likert-type scale varying from "strongly agree" on one end to "strongly disagree" on the other. The items in the scale with words related to "cancer" were replaced by the words "COVID-19." For example, the first item, "There are so many different recommendations about preventing cancer, it is hard to know which ones to follow" was changed to, "There are so many different recommendations about preventing COVID-19, it's hard to know which ones to follow." Prior to adaptation, permission was sought from J. D. Jensen, the lead author of the published paper^[4] on CIOS to which he kindly consented.

Procedure

The total time taken to complete the questionnaire would be approximately 5 min. The questionnaire was pre-tested among 15 individuals and their feedback and opinion was sought which led to a few minor modifications in the socio-demographic questions. The responses of these individuals were not included in the analysis. Thereafter, the final version was circulated among the participants.

Statistical analysis

The data collected by online "Google Form" were downloaded from the survey platform in Excel sheet format. The data obtained were transferred to the computer software program, Statistical Package for Social Sciences-version 10.0 (SPSS-10.0)

for Windows® (SPSS Inc., Chicago, Ill., USA). For most of the variables no data was missing, except annual family income in which 32.2% ($n = 59$) mentioned zero. This response might have been generated by those who thought that the question was about their personal income. As a result, annual family income was excluded from further analysis. To describe sample characteristics, percentage, mean and standard deviation were used. For the modified 8-item CoIOS, the univariate summary statistics, Pearson item-total correlations, scale mean if item deleted, and Cronbach's alpha coefficient was calculated.

Kaiser-Meyer-Olkin (KMO) test was done for sample adequacy of factor analysis and the Bartlett's test of sphericity was done to determine factorability of the correlation matrix. Principal component analysis (PCA) was carried out to identify the factor structure of modified 8-item CoIOS. The number of factors to be retained was examined using Kaiser's criteria^[9] of eigenvalues greater than unity, Cattell's Scree plot inspection,^[10] and Horn's parallel analysis^[11] using Keeling's regression equation.^[12] Both orthogonal (Varimax) and oblique (direct oblimin) rotations were carried out along with Kaiser's normalization to identify the best solution. A cutoff of 0.4 in factor loading was considered significant as per Steven's recommendation.

Item loading (λ) found with factor analysis was used for calculating average variance extracted (AVE) for the assessment of convergent validity, by squaring item loading (λ^2), then adding all items loadings within factor and dividing them by number of items.

Composite reliability was also calculated by formula of (sum of λ^2)/(sum of λ^2 + sum of ϵ) where $\epsilon = 1 - \lambda^2$. Further discriminant value was calculated by calculation of square root of AVE, which can be compared with latent variable correlation value for discriminant validity (DV).

RESULTS

Online responses of a total of 183 participants were received and all were included in the study. Thus, the response rate was 61%, which may be considered as fair. The mean age of the sample was 36.2 (standard deviation [SD] 11.1) years. Nearly 58.5% ($n = 107$) of the sample was male and we managed to achieve an almost equal gender distribution. Other sociodemographic variables and their distribution and frequency are tabulated [Table 1].

The modified 8-item CoIOS was used as Likert scale with a scoring of 1–4 based on responses ranging from “strongly disagree” to “strongly agree.” The most frequent choice was “agree” ($n = 688$; 47%) followed by “disagree” ($n = 537$; 36.7%), “strongly disagree” ($n = 123$; 8.4%), and “strongly agree” ($n = 116$; 7.92%). Overall, 55% of responses were agreed or strongly agreed to information overload. The

mean score and SD of individual items were also tabulated which ranged from 2.14 ± 0.66 to 2.87 ± 0.62 . The mean total score of the scale was 20.35 (SD 3.77) which is 63.59% of maximum possible score of 32. The Cronbach's alpha for full scale was 0.804, and scale mean if item deleted ranged from 17.48 to 18.21, and Cronbach's alpha if item deleted ranged from 0.771 to 0.787. The Pearson's items to total correlation were found to be significant ($P < 0.001$) [Table 2].

KMO measure of sampling adequacy was 0.78, which indicated adequate sample size for the factor analysis. Bartlett's test of sphericity was significant ($\chi^2 = 388.2$, $P < 0.001$), supporting factorability of the correlation matrix. PCA showed two components with an initial eigenvalue greater than unity (3.38 and 1.09), with 42.33% and 13.64% of variance, respectively, making a total of 55.97% variance. Scree plot showed point of inflexion after 2 components [Figure 1], whereas, Horn's parallel analysis suggested one component [Table 3]. Considering Kaiser's criterion and scree plot analysis, 2 components were retained. The rotation sum of squared loadings eigenvalues was 2.31 and 2.16, with variance of 28.91% and 27.07%, respectively for first and second factors.

The first factor had rotated eigenvalue of 2.31 and explained 28.9% of variance, consisting of first five items of the scale [Table 4]. The second item, “There is not enough time to do all of the things recommended to prevent COVID-19” had the highest loading with both rotations (0.857 in Varimax and 0.944 with Oblimin). The fifth item had lowest factor loading with both rotations (0.549 in Varimax and 0.538 in Oblimin). The first component with all these five items together may be named as “Excessiveness of Information” (EI).

The second factor had rotated eigenvalue of 2.16 and explained 27.1% of variance [Table 4]. It consisted of the

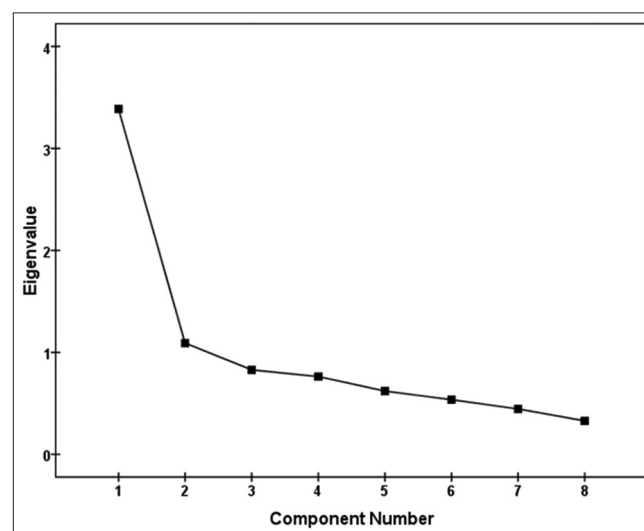


Figure 1: Cattell's scree plot

Table 1: Sociodemographic characteristics (n=183)

Variables	Mean ± SD	Minimum	Maximum
Age, mean±SD	36.2±11.1	18	78
Annual income (in lakh Rupees)	7.7±13.1	0	100
Screen time (in h)	2.6±2.2	0.5	12
Gender		n (%)	
Male		107	(58.5)
Female		75	(41)
Others		1	(0.5)
Religion			
Hindu		131	(71.6)
Christians		31	(16.9)
Muslim/others		4/17	(2.2/9.3)
Marital status			
Unmarried		68	(37.2)
Married		108	(59.0)
Others		7	(3.8)
Occupation			
Students		29	(15.8)
Homemakers		15	(8.2)
Service		39	(21.3)
Teachers		17	(9.3)
Engineers		21	(11.5)
Police force		26	(14.2)
Unemployed/self-employed		36	(19.7)
Education			
Graduation		77	(42.0)
Postgraduation		94	(51.4)
Below graduation		12	(6.6)
History of any major illness			
No		150	(82.0)
Yes		33	(18.0)
Family history of any major illness			
No		133	(72.7)
Yes		50	(27.3)
Working pattern during lockdown			
Working as before		36	(19.7)
Working online		57	(31.1)
Staying at home		90	(49.2)
Screen time reported (in h)			
0-1		21	(11.5)
1-3		53	(29.0)
3-5		40	(21.9)
>5		69	(37.7)
Resuming time for screen after waking up			
Within 15 mins		79	(43.2)
Within 30 mins		40	(21.9)
Within 60 mins		27	(14.8)
After 60 mins		37	(20.2)
Source of information			
Print Media		20	(10.9)
Social media		71	(38.8)
TV		71	(38.8)
Friends/relatives		21	(11.5)

last three items of the scale, with high loading. Varimax rotated solution had highest loading (.778) for item 6 (“I forget most COVID-19-related information right after I hear it”), whereas, item 8 (“I feel overloaded by the amount of COVID-19 information I am supposed to know”) had highest loading with Oblimin rotation. The second component with these three items together may be named as “Rejection of Information” (RI).

The AVE was found to be 0.50 for all eight items, 0.44 for first factor (five items), and 0.59 for the second factor (three items). However, the conventional threshold of convergent validity is considered 0.5 and above. Further discriminant value was calculated by square root of AVE and found to be 0.66 and 0.77 respectively for first and second factor. Both of these values are greater than variable correlation of 0.585, which indicates valid DV.

The composite reliability value was also found to be 0.789 and 0.815 for Factors I and II respectively, which affirmed good construct reliability or internal consistency of scale items. Furthermore, the Cronbach’s alpha for full scale was found to be 0.80 and internal consistency analysis of all five items of CoIOS showed Cronbach’s alpha 0.734 for the first factor, whereas for three items of second factor it was 0.735.

DISCUSSION

Information overload is aversive disposition wherein a person is confused and overwhelmed by excessiveness of information exceeding his information processing capacity, which may lead to stress and confusion.^[13] The CIOS is used for measuring cancer-related information overload, which is well validated and widely used in cancer. CIOS has been modified and studied for validity for use in patients with atrial fibrillation,^[5] adapted to assess overload of healthy diet information,^[6] and for sun safe behaviors.^[7] We thought that information overload could be an important factor in determining healthy behaviors in COVID-19 and hence planned to assess the psychometric properties of the 8-item CoIOS with an aim of adapting and validating the scale for studying information overload in relation to COVID-19 among Indian citizens.

Methodological issues

Scale development process involves many complex and systematic procedures with theoretical and methodological rigor. Similarly, adapting or translating a scale for the purpose of different illnesses and different populations needs many considerations.

Data collection by online survey was the only option in view of social distancing measures strictly implemented during COVID-19 pandemic. It had certain advantages such as avoidance of physical closeness, low cost, less time, high response, and convenience. However, it also posed some challenges such as maintaining clearly defined population and representativeness issues.^[14] To overcome some of these limitations of online survey, we approached with “quota sampling” by individual invitation to participate in this survey. We invited fixed numbers of persons with quota of occupation such as students, homemakers, businessmen, police or defense personnel, engineering, or service class. We excluded health-care professionals in view of their professional training and their usual practice

Table 2: Univariate summary statistics for the modified 8-item corona information overload scale and pearson item-total correlations, Cronbach's alpha

CoIOS items	Response option frequencies [†] (%)				Mean±SD	Skewness	Kurtosis	Scale mean if item deleted	Pearson's item - total correlation	Cronbach's alpha if item deleted
	Strongly disagree	Disagree	Agree	Strongly agree						
1	20 (10.9)	56 (30.6)	84 (45.9)	23 (12.6)	2.60±0.84	-0.23	-0.49	17.75	0.701**	0.771
2	28 (15.3)	68 (37.2)	75 (41)	12 (6.5)	2.38±0.82	-0.11	-0.61	17.96	0.630**	0.786
3	14 (7.7)	70 (38.3)	84 (45.9)	15 (8.2)	2.54±0.75	-0.10	-0.30	17.80	0.665**	0.775
4	15 (8.2)	48 (26.2)	104 (56.8)	16 (8.7)	2.66±0.75	-0.52	0.07	17.69	0.669**	0.774
5	7 (3.8)	28 (15.3)	129 (70.5)	19 (10.4)	2.87±0.62	-0.83	1.77	17.48	0.574**	0.787
6	26 (14.2)	108 (59)	46 (25.1)	3 (1.6)	2.14±0.66	0.17	0.01	18.21	0.665**	0.773
7	6 (3.3)	93 (50.8)	80 (43.7)	4 (2.2)	2.44±0.59	0.04	-0.36	17.90	0.665**	0.773
8	7 (3.8)	66 (36.1)	86 (47.0)	24 (13.1)	2.69±0.74	0	-0.39	17.66	0.617**	0.784
Total	123 (8.4)	537 (36.7)	688 (47)	116 (7.9)						0.804
	Total score, mean±SD				20.35±3.77					

**P<0.001. †Scoring: 1 - Strongly disagree; 2 - Disagree, 3 - Agree and 4 - Strongly agree (overall, 55% responses agreed or strongly agreed to information overload). CoIOS – Corona Information Overload Scale; SD – Standard deviation

Table 3: Decision to make numbers of factors based on various criteria

Criteria	First factor (%)	Second factor (%)	Interpretation
1. Initial eigen value over unity ^[9]	3.38	1.09	Two-factor solution
2. Total variance explained by all components should be higher	42.3	13.6	Two-factor solution
3. Scree plot ^[10] [Figure 1]			Two-factor solution
4. Horn's parallel analysis ^[11]			
Actual eigenvalue from PCA	3.38	1.09	One factor solution
Criterion value from parallel analysis	1.31	1.21	
5. Rationality/Meaningful factor structure	Yes	Yes	Two factor solution

Table 4: Principal components of scale items (Varimax and Direct Oblimin rotation with Kaiser normalization showing factor loadings >0.4 in bold) (n=183)

Items of CoIOS	Principal components with varimax rotation		Principal components with oblimin rotation [†]	
	EI	RI	EI	RI
2. There is not enough time to do all of the things recommended to prevent COVID 19	0.857	-0.051	0.944	0.283
4. No one could actually do all of the recommendations regarding COVID 19 that are given	0.688	0.238	0.692	-0.075
3. It has gotten to the point where I don't even care to hear new information about COVID 19	0.583	0.341	0.553	-0.214
1. There are so many different recommendations about preventing COVID 19, it is hard to know which ones to follow	0.578	0.376	0.540	-0.253
5. Information about COVID 19 all starts to sound the same after a while	0.549	0.251	0.538	-0.126
6. I forget most COVID 19 related information right after I hear it	0.230	0.778	0.067	-0.780
7. Most things I hear or read about COVID 19 seem pretty far-fetched	0.245	0.770	0.085	-0.767
8. I feel overloaded by the amount of COVID 19 information I am supposed to know	0.135	0.766	-0.035	-0.793
Eigenvalue - initial (rotated)	3.38 (2.31)	1.09 (2.16)	3.38 (2.83)	1.09 (2.64)
Percentage of variance - initial (rotated)	42.3 (28.9)	13.6 (27.1)	42.33	13.64
AVE	0.44	0.59	0.45	0.61
DV=(square root of AVE)	0.66	0.77	0.67	0.78
CR	0.79	0.81	0.79	0.82

Bold values indicates higher factor loadings being included as factor structure. The thresholds values are as follows: Convergent Validity=AVE > 0.5; Discriminant Validity=Square root of AVE greater than inter-construct correlations (Maximum correlation value here is 0.585), Reliability=CR >0.7. †Pattern matrix. EI – Excessiveness of information; RI – Rejection of information; AVE – Average variance extracted; DV – Discriminate value; CR – Composite reliability; COVID 19 – Coronavirus Disease-19

of paying heed to information from scientifically valid sources. This helped us to achieve adequate representation across various occupations, a well-defined population and to calculate actual response rate of the survey. Out of a total of 300 contacts approached, we received 183 completed responses. This amounts to a fairly good response rate of 61%, which was definitely one of the strengths of our survey.

In our result, we had greater representation of highly educated participants; 51% of postgraduates and 42%

graduate sample population indicated that we achieved a well-defined population which may not have been a true representation of our community. This may be viewed as sampling bias, where sample actually represents social contacts of the researcher; instead of actual population representations. The use of internet, social media, and participating in online surveys are common among educated and younger population than older adults.^[15] This implies that overrepresentation of younger individuals is also associated with online survey.

The mean age of our study population was 36.2 (SD 11.1) years.

Internal consistency of corona Information Overload Scale

In this study, we found Cronbach's alpha to be 0.80 for full eight-item scale which indicates satisfactory internal consistency. This is in accordance with similar Cronbach's alpha 0.80 reported by study of Ramondt and Ramirez.^[6] Another study by Obamiro and Lee^[5] reported a higher Cronbach's alpha of 0.86 and all items loaded onto a single factor. Higher Cronbach's alpha denotes higher interrelatedness between items or homogeneous constructs suggesting unidimensionality.^[16] The Cronbach's alpha value of our instrument suggests interrelatedness between items but the value is not so high as to express unidimensionality. Pearson's items to total correlation was found to be significant in our study which suggests that all the items in the CoIOS were correlated among themselves which further affirms its reliability [Table 2].

Few of the options were chosen much less, like "strongly agree" option for questions, 6 ("I forget most COVID-19-related information right after I hear it") and 7 ("Most things I hear or read about COVID-19 seem pretty far-fetched") were chosen by 1.6% and 2.2%, respectively. It is possible that the phrases "right after I hear it" and "pretty far-fetched" are not endorsed by many, and require modification to "after I hear it" and "seem unlikely." Similarly, the "strongly disagree" option for questions 5 ("Information about COVID-19 all starts to sound the same after a while") and 8 ("I feel overloaded by the amount of COVID-19 information I am supposed to know") were endorsed infrequently by participants, and may require modification to improve proportional response representation.

Factor analysis

CiOS was originally developed to assess information overload in cancer and subsequently adapted to few other chronic health conditions such as diet information, sun exposure, or atrial fibrillation. Studies for adaptability of the scale to these chronic noncommunicable disease conditions uniformly found a single-factor structure for the scale. For the first time, we were studying CIOS for its suitability for an acute infective illness like COVID-19.

PCA, which is considered more suitable for data reduction techniques, offered a simple solution which could be interpreted more easily, in comparison to other methods. PCA with varimax rotation suggested 2 factors (or principal components) with eigenvalues of 2.31 and 2.16 with variances of 28.9 and 27.07%, respectively. We named them as "Excessiveness of information" and "Rejection of Information." However, parallel analysis suggested a single factor of five items, this is in agreement with the previous study by Obamiro and Lee.^[5]

Accepting single-factor structure, supported by parallel analysis and rejecting two factorial construct of CoIOS is not easy way out [Table 3]. However, if we observe the second factor carefully, "Rejection of Information" is difficult to discard. We found higher average variance extracted and square root of AVE calculated (0.59 and 0.77) for second factor in comparison to first factor (0.44 and 0.66). The second factor alone qualifies above the conventional threshold of convergent validity of 0.5.

Item no 8 "I feel overloaded by the amount of COVID-19 information I am supposed to know" is considered as overall idea of information overload. This item is even proposed as single item construct for information overload scale.^[17] This item has second highest mean contribution to total score and loaded with "RI" in our study [Table 4].

The possible reason of contradictory factor structure may be illness and information intensity. The use of the parent version of CIOS in earlier studies was mostly among chronic noncommunicable illnesses such as cancer, nutritional status, sun safe behaviors, or atrial fibrillation. These are nowhere near to the intensity and volume of information pouring in everyday in relation to the current pandemic of COVID-19 which has probably assumed the proportions of an "Infodemic."^[18] Thus, it far exceeds the previously studied conditions in terms of sheer volume of information as well as the intensity of fear it evokes. The information in relation to COVID-19 is often inconsistent, nonconclusive, experimental, unscientific, confusing, and rapidly changing and "infodemic monikers."^[19]

Excessiveness of information itself is not equivalent to idea of information overload. "Rejection" seems to be a core construct. This rejection may be a response to perceived "excessiveness" or "futility" or "erroneous" or "fake" information or ambiguity aversion. The RI is just not a cognitive approach, but behaviorally, it has been associated with decreased preventive health behaviors as reported with response to cancer-related information,^[20-22] The progression of cognitive fatigue and rejection may lead to the idea of "fatalism" consisting of predestination, pessimism, and attribution of one's health to luck.^[7,23] These arguments go in favor of rejecting a unitary construct and justifying a multi-factorial construct of CoIOS being used in COVID-19 pandemic.

It has been suggested that CIOS may be adapted to identify conditions with overabundance of available health information. The results can be used for making the available information more precise and tailor-made for better self-management.^[5] Although it was primarily designed and adapted for various chronic, noncommunicable diseases, we found the construct valid for preventive aspects of COVID 19. Information and its overload are crucial for the determination of one's health-related preventive behavior.

This study implies that a validated scale like CIOS is actually specific to the idea of information overload irrespective of health conditions. Initially, it was developed for cancer such as chronic persisting illness and found reliable for conditions such as atrial fibrillations and information on healthy diet recommendations. We found that construct of information overload as measured by CoIOS is applicable to pandemic such as COVID-19.

Nonprobability sampling restricted to smart phone users remain an important limitation of our study. Restriction to an urban sample with higher educational attainment and with ability to read and write in English further limits the representative nature of the sample. Despite certain precautions, we did not have a foolproof method of preventing multiple responses from the same individual.

CONCLUSION

CIOS scale when adapted for COVID-19 (i.e., CoIOS) appears to be a valid and reliable scale for measuring health information overload. However, it has a two factor component, namely “excessiveness of information” and “Rejection of Information.” Furthermore, 55% of responses were in agreement of experiencing information overload. Further studies are required to validate the scale in other population to increase generalizability.

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Conflicts of interest

There are no conflicts of interest.

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