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# Compulsive Buying Behavior and Online Shopping Addiction of Women

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**Abstract:** The rise of e-commerce and online shopping platforms has revolutionized the way we shop and make purchases. While the convenience and accessibility of online shopping have been a boon for consumers, it has also led to the rise of compulsive buying behavior and online shopping addiction among women. The purpose of this paper is to explore the phenomenon of compulsive buying behavior and online shopping addiction among women and to understand the factors that contribute to this problem. This paper provides a comprehensive review of the literature on compulsive buying behavior and online shopping addiction using a purposeful sample of two hundred women who consider themselves to be addicted to online shopping. The findings from this paper can help shed light on the issue and inform future research and interventions aimed at addressing compulsive buying behavior and online shopping addiction among women.

**Keywords:** Online Shopping Addiction, Buying behavior, e-commerce, covid-19, working status.

## 1 Introduction

Compulsive buying behavior, also known as compulsive shopping disorder, is a phenomenon that has gained significant attention in recent years. It refers to an irresistible urge to purchase items, even when there is no real need or desire for them. The rise of e-commerce and online shopping platforms has made it easier for individuals to indulge in compulsive buying behavior and has resulted in a growing number of cases of online shopping addiction among women. The phenomenon is particularly prevalent among women due to their heightened emotional and psychological engagement with shopping, as well as the social and cultural pressure to look good and keep up with the latest trends [1].

Studies have shown that compulsive buying behavior and online shopping addiction can have a significant impact on an individual's financial and emotional well-being. It can result in mounting debt, increased stress, and reduced self-esteem [2]. Furthermore, the anonymity of online shopping can also lead to excessive spending and increased impulse buying behavior, as individuals are less likely to be held accountable for their actions [3]. The contributing factors to compulsive buying behavior and online shopping addiction among women are complex and multifactorial. They include psychological factors, such as low self-esteem, depression, and anxiety, as well as environmental factors, such as the availability of credit and the influence of advertising and media. Social and cultural factors, such as the pressure to conform to societal norms and keep up with the latest trends, also play a role in the development of compulsive buying behavior and online shopping addiction [4].

Due to COVID – 19 pandemic lockdowns the extent of online shopping has increased much more. Risk factor was present in both the Indian ESG Index and the Indian Energy Stock Index as a result of the COVID-19 news and energy revolution [5]. It is crucial to look into the causes of price fluctuations and appreciate the source and channel of risk transfer in a bid to more efficiently eliminate perverse incentives and maintain financial prosperity [6]. This new mode of online shopping experience is found to cause a problematic online shopping behavior [7]. The virulent COVID19 virus, which is extremely contagious and dangerous, has recently infected the whole planet. In addition to harming people's health, the COVID-19 outbreak also had a negative impact on businesses and financial markets [8]. Online shopping addiction among college students was found to be at medium level [9]. E-commerce gained considerable

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popularity during the COVID-19 pandemic and this could have triggered the addiction to online shopping [10]. Shopping is usually gendered as pursued mostly by women. A Spanish study concluded that slightly higher rates of compulsive shopping were found among women [11].

Compulsive buying behavior and online shopping addiction among women is a growing concern that has serious implications for an individual's financial and emotional well-being. The factors contributing to this phenomenon are complex and multifactorial, and a deeper understanding of the issue is needed to inform future research and interventions aimed at addressing compulsive buying behavior and online shopping addiction among women.

#### **a) Prevalence of Compulsive Buying and Online Shopping Addiction in Indian Women**

Several studies have investigated the prevalence of compulsive buying and online shopping addiction in India, with varying results [12] [13]. Research has shown that the prevalence of compulsive buying behavior in India is higher among women compared to men [14], and that online shopping addiction is also a growing problem in the country [15]. In modern era, shopping is a necessary part of life, but research has shown that for some people, it also serves as a kind of pleasure, with positive benefits. For a small percentage of people, shopping (or buying) may be a damaging and destructive behavior, when carried to the extreme [16]. Their compulsive tendencies can be made worse by the "always open" nature of online purchasing [17]. Uncontrolled buying is characterised primarily by impulsivity and repeat of buying behaviour, the perception of a need to buy as intrusive, failed attempts to exert control over the behaviour, unfavorable outcomes [18].

#### **b) Cultural and Socioeconomic Factors Contributing to Compulsive Buying and Online Shopping Addiction**

Studies have suggested that cultural and socioeconomic factors play a significant role in the development of compulsive buying and online shopping addiction in India [19] [13]. These factors include pressure to conform to societal norms [19], a growing consumerist culture [13], and a lack of financial literacy [14]. Online shopping may be preferred over traditional brick-and-mortar stores for a number of reasons, including the simplicity of searching, lower costs, a wider selection of goods, time saving, convenience of use, entertainment, special offers, and the tendency of the customer to act impulsively. Due to lack of self-control, many people have discovered themselves addicted to internet shopping [20]. Online purchasing has become a significant pattern of consumption, which has a significant impact on people's attitudes and personality development, due to the rapid growth of e-commerce and telecommunications equipment [21]. Several stages make up the process of shopping, including collecting information on a product, processing and assimilating that knowledge to analyze different product selections, and making the actual purchase [7].

#### **c) Consequences of Compulsive Buying and Online Shopping Addiction**

Research has shown that compulsive buying and online shopping addiction can have significant negative impacts on individuals, including financial problems [15], relationship difficulties [19], and decreased overall well-being [13]. One in twenty people experience compulsive buying behaviour, at a certain point during their lives, and compulsive buying behaviour is more common among young women than among men [16]. Online shopping duration and frequency daily are important indicators of online shopping addiction [22]. Online shopping addiction was favorably correlated with both financial literacy and financial well-being. Financial well-being was a greater predictor, possibly because those who felt good about their financial situations might be more willing to increase their online spending [23]. The actual causes of addiction can be broken down into four categories: (1) hedonic impulses, which include gratification, relaxation, cheerfulness, and enjoyable; (2) motivational impulses, which include the availability of inexpensive goods, a wide variety of options, promotions, and the ability to compare goods; (3) technological factors, which include ease of use and convenience; and (4) psychological factors, which include stress and frustration [20]. Female students seem to have more addiction to online shopping than male students as observed by excessive consumption, functional damage and online shopping pleasure [24].

#### **d) Underlying Psychological and Neurobiological Factors**

Several studies have investigated the underlying psychological and neurobiological factors that contribute to compulsive buying and online shopping addiction in India [15] [13]. Research has shown that these behaviors are associated with imbalanced neurotransmitter levels in the brain [13], as well as underlying psychological conditions such as anxiety and depression [15]. Compared with people whose addiction is moderate or no addiction, those with a significant level of online shopping addiction, score more depressed [25]. Online shopping enables consumers to save time, avoid boredom, have fun, and follow trends while doing their shopping [26]. The aspects of compulsive buying online were positively impacted by excessive social media use. The favorable impact of excessive usage of social networking sites on compulsive online shopping was mediated by the power-prestige and anxiety components of money attitude [27].

#### **e) Interventions for Compulsive Buying and Online Shopping Addiction**

A variety of interventions have been developed to treat compulsive buying and online shopping addiction in India, including both pharmacological and psychotherapeutic approaches [15]. Research has shown that these interventions can be effective in reducing symptoms and improving overall well-being [19]. Five phases of shopping addiction were Retail therapy, Denial, Debt-ridden, Impulsive buying, Compulsive buying [28]. When compared with regular buyers, compulsive buyers are more materialistic in their product choices, more likely to overspend but less emotionally react to its effects and less aware of their budget (financial) constraints while shopping [29]. Because of the fast spread of the Internet, it is now feasible to perform things both in-person and online. This has also led to the emergence of new digital-related behavioural addictions, such as online shopping addiction [30]. Studies indicate that there has been a shift from in-store to online shopping during the recent period of e-commerce growth. This might be a reason for compulsive shopping disorder of a virtual nature that can be classified as addictive behaviours under the umbrella of problematic internet usage [31]. Also, some study indicates that the pandemic had impacted the degree of participants' online-shopping addiction, their level of academic procrastination and negative emotions [32]. Further, the duration of time spent on the internet shopping each day and the frequency with which it is done daily, have a major impact on the level of online shopping addiction. The existing research suggests that compulsive buying behavior and online shopping addiction are growing problems in India, particularly among women. Cultural and socioeconomic factors play a significant role in the development of these behaviors, and they can have significant negative consequences on individuals. Further research is needed to develop culturally sensitive interventions for compulsive buying and online shopping addiction in India.

## 2 Methodologies

### 2.1 Aim of the Study

1. To analyse the factors determining the attitude of online shopping.
2. To measure the addiction of online shopping.
3. To analyse the factors causing addiction of online shopping.

### 2.2 Hypotheses

1. The socio – economic factors like age, monthly income, working status and expenditure on online shopping, determine the frequency of online shopping.
2. Online shopping addiction is provoked by socio economic conditions.

### 2.3 Methodology

Online survey was used to collect data through a purposive sample of two hundred urban women who engage in online shopping and are residing in Salem City. The primary data were analysed, using statistical tools like ANOVA, factor analysis and chi-square test.

## 3 Results and Discussions

**Table 1: Socio – Economic Profile of the Respondents**

<b>Age Group of the Respondents</b>		
<b>Particulars</b>	<b>Frequency</b>	<b>Percent</b>
<35	72	36.0
36-45	64	32.0
46-55	42	21.0
>56	22	11.0
Total	200	100.0
<b>Working Status of the Respondents</b>		
Working	84	42.0
Not – Working	116	58.0
Total	200	100.0
<b>Average Household Monthly Income</b>		

<25000	72	36.0
25001 – 50000	56	28.0
50001 – 100000	45	22.5
>100001	27	13.5
Total	200	100.0
<b>Average Amount Spent for Online Shopping Monthly</b>		
<5000	124	62.0
5001 – 10000	52	26.0
> 10000	24	12.0
Total	200	100.0
<b>Frequency of Online Shopping</b>		
Very Often	51	25.5
Often	30	15.0
Occasionally	35	17.5
Rarely	29	14.5
Very Rarely	55	27.5
Total	200	100.0
<b>Major Category of Items bought in Online Shopping</b>		
Cosmetics	13	6.5
Fashion Accessories	37	18.5
Food Products	18	9.0
Garments	26	13.0
Books	36	18.0
Household Articles	38	19.0
Precious Jewellery	32	16.0
Total	200	100.0

Around half the respondents were in the age group of less than 35 and 36 to 45. Around half the respondents were working. Majority attempted to spend on the average, less than Rs. 5000 per month for online shopping. Around 26 percent of respondents attempted to do online shopping very often. Garments, fashion accessories and household articles were largely preferred by the respondents.

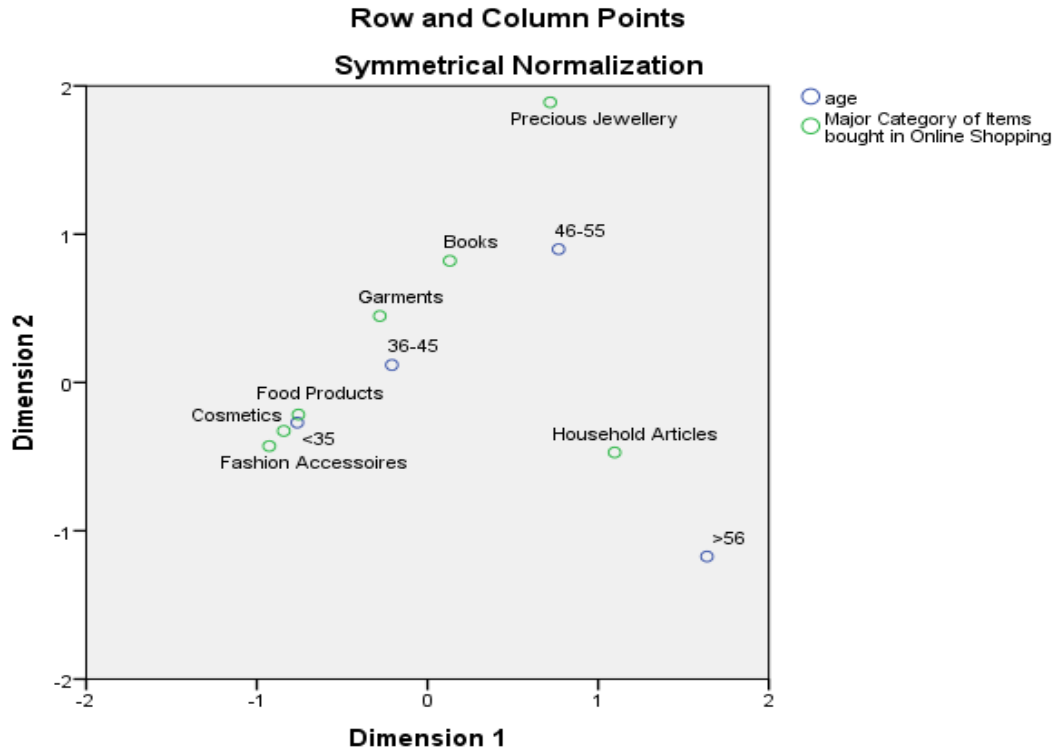
### 3.1 Relationship between Age and Major Category of Items Purchased in Online Shopping

To find out the age wise preference of goods shopped online, correspondence analysis was applied. Table 2 shows the major types of goods, preferred by different age groups.

**Table 2:** Correspondence Table

Age	Major Category of Items bought in Online Shopping							
	Cosmetics	Fashion Accessories	Food Products	Garments	Books	Household Articles	Precious Jewellery	Active Margin
<35	9	29	9	9	9	6	1	72
36-45	6	9	9	15	12	13	0	64
46-55	0	1	0	6	14	17	4	42
>56	0	0	0	0	1	21	0	22

Active Margin	15	39	18	30	36	57	5	200
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**Figure 1:** Scores for each category on both dimensions for Age and Major Category of Items Bought

From the above figure, respondents, in the age group of less than 35, preferred cosmetics, fashion accessories and food products. The 36 to 45 age group largely purchased garments. The books were largely preferred by the middle age group of 46 to 55. The respondents, who were more than 56 years, bought household articles online. The least preferred article was the precious jewel.

**Table 3:** Cross Tabulation between Working Status and Major Category of Items Bought

Working Status of the Respondents	Major Category of Items bought in Online Shopping							Total
	Cosmetics	Fashion Accessoires	Food Products	Garments	Books	Household Articles	Precious Jewellery	
Working	12	31	11	8	15	4	3	84
Not - Working	3	8	7	22	21	53	2	116
<b>Total</b>	15	39	18	30	36	57	5	200

**Table 4:** Chi-Square Tests

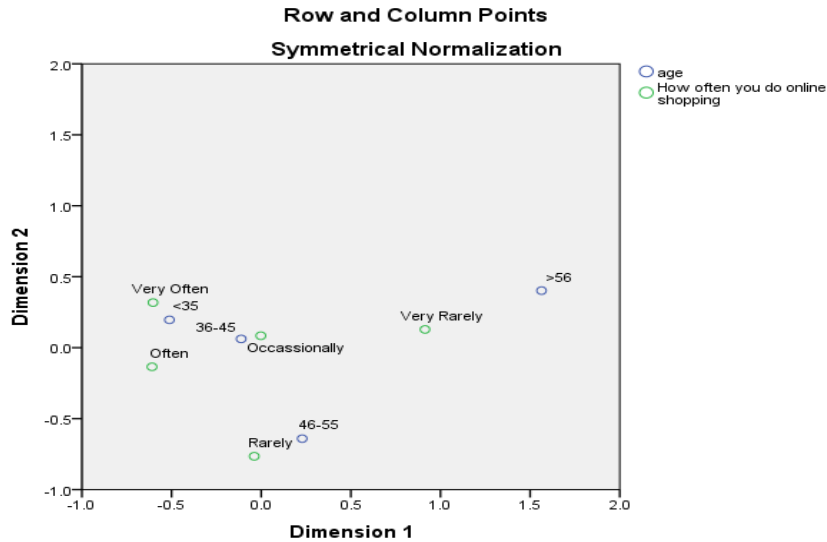
Particulars	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.286 <sup>a</sup>	6	.000
Likelihood Ratio	74.075	6	.000
Linear-by-Linear Association	50.353	1	.000
N of Valid Cases	200		

a. 2 cells (14.3%) have expected count less than 5. The minimum expected count is 2.10.

A significant difference was found between the working status of women and major category of items, bought online ( $p < 0.005$ ). The working women largely went for cosmetics and fashion accessories. The major category of items preferred by non – working women was household articles.

**Table 5:** Correspondence Table

Age	Time Interval for Preferring Online Shopping					Active Margin
	Very Often	Often	Occasionally	Rarely	Very Rarely	
<35	25	14	13	9	11	72
36-45	18	10	11	9	16	64
46-55	7	6	7	9	13	42
>56	1	0	4	2	15	22
Active Margin	51	30	35	29	55	200

**Figure 2:** Scores for each category on both dimensions for Age and Time Interval for Preferring Online Shopping

The respondents below the age of 35, were found to do online shopping very often. The age group of 36 to 45 was found to do online shopping occasionally. The age group of 46 to 55 did online shopping rarely and women above 56 years, were found to do online shopping very rarely.

### 3.2 Factors Determining the Preference towards Online Shopping

To find out the major factors, determining the tendency towards online shopping, factor analysis was applied. In this regard, KMO and Bartlett's Test was conducted, to test the sampling adequacy.

**Table 6:** KMO - Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.848
Bartlett's Test of Sphericity	Approx. Chi-Square	708.364
	Df	21
	Sig.	.000

The above Table discloses that the Kaiser-Meyer\_Olkin (KMO) measure of sampling adequacy was found to be 0.848. Since the KMO measure exceeded the standard measure of 0.7 it was concluded that the sample selected for the study was adequate for the conduct of factor analysis.

**Table 7:** Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.867	55.246	55.246	3.867	55.246	55.246
2	1.268	18.107	73.353	1.268	18.107	73.353
3	.538	7.684	81.037			
4	.464	6.624	87.661			
5	.362	5.175	92.836			
6	.298	4.256	97.091			
7	.204	2.909	100.000			

**Extraction Method: Principal Component Analysis.**

From the above Table, it could be understood that out of 7 factors considered for the study, the factors with factor loadings more than 1.00, were extracted. Accordingly, the first factor explained 55.246 per cent of the total variance, the second factor could explain 18.107 per cent of the total variance and the third factor has explained 10.656 per cent of the total variance. The two sets of factors explained cumulatively 73.353 per cent of the total variance. The remaining variance of 26.647 per cent could be explained by factors, which were not considered for the study.

It could be accepted that the factors considered for the study had accounted for around three fourths of the total variance explained. To identify the components of each factor, varimax rotation method was used. The following table furnishes the components of each factor.

**Table 8: Rotated Component Matrix<sup>a</sup>**

Factors	Component	
	1	2
I do online shopping as it gives more offers and discounts	.312	.788
I feel at ease to shop online, as I could not shop outside	.812	
I felt attracted towards the new trends available in online shopping than in physical mode	.822	
The virtual payment me to do online shopping	.871	
I felt the price is much lower in online shopping		.887
Better brands were available online	.887	
I felt quality of the products are better online	.434	.639
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		
a. Rotation converged in 3 iterations.		

The major factors found determining the preference for online shopping were availability of better brands and lower price.

### 3.3 Factors determining the Online Shopping Addiction

The online shopping addiction of the sample women was identified by five-point scaling, with a score of 5 for strongly agree, 4 for agree, 3 for neither agree nor disagree, 2 for disagree and 1 for strongly disagree towards the following statements. Higher score indicates higher addiction level. The average score of online shopping addiction was 19. The maximum score was 45 and standard deviation was 10.86.

1. I think about shopping all the time.
2. I hide my credit card bills, receipts, shopping bags etc.
3. I used to lie about how much is spent.
4. I shop more than I can afford.
5. When I went shopping, I felt my mood improved.
6. I feel like getting relived from my stress, anxiety, depression when I do shopping.
7. Some of the items I bought remained not opened in closets or remained unused.
8. I frequently buy things, without any particular need or plan.
9. I can't stop my online shopping, even if I tried to cut back.

**Addiction Score of Online Shopping**

Addiction Score of Online Shopping	Frequency	Percent
<10	62	31.0
11-20	68	34.0
21-30	40	20.0
31-40	11	5.5
41-50	19	9.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

Only a small number of 30 reported the addiction score in the range of 31 to 40 and 41 to 50. To find out the factors determining the online shopping addiction level, to be calculated from the above statements, the regression model was applied.



**Table 9: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876 <sup>a</sup>	.767	.761	4.15971

a. Predictors: (Constant), How often you do online shopping, age, Working Status of the Respondents, Average Household Monthly Income, Average Amount Spent for Online Shopping Monthly

The coefficient of correlation between the dependent variable (online shopping addiction) and the independent variables (time interval for doing online shopping, age, working status, monthly income of the family and monthly expenditure for online shopping) was found to be 0.876. The R square value as of 0.767, indicated that 76.7 per cent of the changes in the online addiction, were influenced by the selected independent variables.

**Table 10: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11054.531	5	2210.906	127.774	.000 <sup>b</sup>
	Residual	3356.824	194	17.303		
	Total	14411.355	199			

a. Dependent Variable: addiction score  
b. Predictors: (Constant), How often you do online shopping, age, Working Status of the Respondents, Average Household Monthly Income, Average Amount Spent for Online Shopping Monthly

The significant relationship between online addiction and its determinants was proved by the significance value of less than 0.005.

**Table 11: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.961	2.153		4.162	.000
	Age	-.825	.336	-.097	-2.458	.015
	Average Household Monthly Income	-.065	.394	-.008	-.164	.870
	Working Status of the Respondents	.452	.772	.026	.585	.559
	Average Amount Spent for Online Shopping Monthly	7.512	.756	.619	9.940	.000
	Time Interval of Online Shopping	-1.552	.354	-.284	-4.381	.000

a. Dependent Variable: Online Shopping Addiction

The factors like age, monthly expenditure on online shopping and time interval for doing online shopping, were found significant in determining the online shopping addiction of the sample women. The household monthly income and working status were insignificant in causing the online shopping addiction of the sample.

## 4 Conclusions

The higher income of women and their working status did influence their online shopping behavior. The items they bought through online shopping also significantly varied with age and working status of women. The major factors, which determined the preference for online shopping, were availability of better brands and lower prices. The major factors influencing online shopping addiction among the sample were age, monthly spending on online shopping, and time interval. The study recommends women's households to intelligently plan their online activities and avoid the negative consequences of online shopping addiction. In conclusion, the existing research on compulsive buying behavior and online shopping addiction among women in India suggests that these behaviors are growing problems in the country. Cultural and socioeconomic factors, such as societal norms, consumerist culture, and lack of financial literacy, contribute to their development. Compulsive buying and online shopping addiction can have significant negative impacts on individuals, including financial problems, relationship difficulties, and decreased overall well-being. Moreover, these behaviors have underlying psychological and neurobiological factors, such as imbalanced neurotransmitter levels and underlying psychological conditions like anxiety and depression. Interventions, including both pharmacological and psychotherapeutic approaches, have been developed and shown to be effective in reducing symptoms and improving overall well-being. Further research is needed to develop culturally sensitive interventions for compulsive buying and online shopping addiction in India.

## 5 Recommendations

The research recommends education about buying behaviour and addiction psychology should be provided to women

who have engaged in online shopping activities. Conferences and workshops should be conducted to create the awareness about compulsive buying behaviour. The general public will become more aware of and comprehend the harmful nature of this behaviour as a result.

### Conflicts of Interest Statement

The authors certify that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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The authors have declared that no competing interest exists.

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