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Financial Toxicity and Coping Strategies in Workers with Chronic Illnesses

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Abstract. Current study aims to examine the relationship between financial toxicity and coping strategies among workers living with chronic illnesses. Financial toxicity refers to the psychological and economic distress caused by the high and ongoing costs of medical treatment. A quantitative method with a correlational design was employed. A total of 124 participants who were workers with at least one type of chronic illness were recruited using convenience sampling. Data were analyzed using Spearman's correlation to determine the strength and direction of relationships between variables. The results revealed no significant correlation between overall financial toxicity and coping strategies. However, the behavioral disengagement dimension showed a significant negative correlation with financial toxicity, whereas the planning dimension demonstrated a significant positive correlation. These findings suggest that individuals with chronic illnesses tend to exert less effort when facing financial strain; however, once they feel sufficiently confident, they begin to plan strategies to manage their condition. The study contributes to understanding the psychological dynamics between financial stress and coping mechanisms among workers with chronic diseases.

Keywords: *financial toxicity, coping strategies, workers, chronic illness, financial stress*

Introduction

Chronic diseases are often associated with the aging process in older adults. However, the occurrence of chronic diseases is not solely caused by the aging process; other contributing factors include unhealthy lifestyles, such as fast-food consumption, smoking habit, and alcohol consumption (United Nations, 2015). The World Health Organization (2022) states that unhealthy lifestyles are the reason behind deaths from chronic diseases in those under the older adults. This is in line with the opinion of the Director of Prevention and Control of Non-Communicable Diseases (P2PTM) at the Ministry of Health, Cut Putri Ariane, who also stated that chronic diseases are currently the leading cause of death in Indonesia, largely due to unhealthy lifestyles (Ministry of Health, 2018; WHO, 2022).

Data from the 2018 Basic Health Research (Riskesdas) shows that the number of people with chronic diseases in Indonesia is increasing. For example, in 2013, there were around 6.9% of people with diabetes mellitus, but in 2018 this figure increased to 8.5%. Cut

Putri Ariane also added that the adoption of unhealthy lifestyles has put the productive age group (aged 15-64) at risk of developing chronic diseases. This relates to a 2019 study that found that 53.8% of individuals aged 18-34 had at least one chronic disease and 22.3% had more than one type of chronic disease, with obesity being the most common condition (Ministry of Health, 2018; P2PTM Ministry of Health RI, 2020; Watson et al., 2022).

Chronic diseases are non-transmissible disease conditions that develop slowly and last for more than a year, requiring ongoing medical treatment that limits daily activities. Treatment becomes more difficult if a patient with a chronic disease has more than one chronic condition. Patients incur significant costs to meet their medication requirements regularly, especially for newer or specialty medications (Centers for Disease Control and Prevention, 2022; Hwang et al., 2001; Mann et al., 2014).

Patients' dependence on their healthcare can lead to financial toxicity, the negative impact of the financial burden caused by the cost of medical treatment on their well-being. High medical costs can impact financial well-being, psychological distress, and coping behaviors. Changes in a patient's financial situation due to decreased income can make it difficult to meet basic needs and cover treatment costs. When patients experience financial hardship due to increased medical costs or decreased income, then the psychological distress leads to anxiety or stress about medical costs, prompting patients to employ coping strategies, such as delaying medication prescriptions as a way to manage their financial problems (Altice et al., 2016; Harrison & Meyer, 2021; Lentz et al., 2019; Smith et al., 2022; Zafar & Abernethy, 2013).

Persistent financial toxicity can lead chronic illness patients to experience long-term financial difficulties, such as depleted savings, accumulating debt, and even bankruptcy (Zafar & Abernethy, 2013). To cope, patients with financial toxicity tend to engage in maladaptive behaviors, such as delaying medication purchases or limiting spending on basic necessities as a way to manage their financial situation. These behaviors are undertaken as a way to address financial issues because they are considered effective in reducing excessive psychological stress that can negatively impact physical health (Carver, 1997). The limitations caused by this financial burden can leave patients feeling isolated and ultimately experience a decline in their quality of life and health, even increasing the

risk of death (Aviki et al., 2022; Coughlin et al., 2021; Esselen et al., 2021; Harrison & Meyer, 2021; Lentz et al., 2019).

In addition to being more susceptible to chronic diseases, productive-age patients tend to have fewer savings but more dependents (family or personal assets) than other age groups (Adams, 2017; Koczwara et al., 2016; Ramsey et al., 2013; Smith et al., 2022). This makes them more vulnerable to increased financial toxicity than other age groups, especially those without health insurance. According to the 2020 JKN annual report, 18.6% of total National Health Insurance (BPJS-JKN) claims were caused by eight types of degenerative diseases, with heart disease leading the list. Most cancer patients from low socioeconomic levels cannot receive full cancer care and only receive basic services at local primary (public) health facilities, and only a small proportion receive referral services at secondary health facilities. Moreover, patients have difficulty accessing health services and services from specialist doctors (Kosen, 2022; Lentz et al., 2019; Schaefers, 2022).

In this study, researchers sought to determine the relationship between financial toxicity and coping strategies using quantitative methods with a correlation design technique. To measure financial toxicity, the researchers used the Comprehensive Score for Financial Toxicity (COST) to assess participants' subjective financial toxicity, referring to their financial situation and negative feelings arising from treatment (Pangestu & Rencz, 2022). Furthermore, to measure coping strategies, the Brief COPE was used, a tool that assesses coping strategies consistently used to deal with stress (Bose et al., 2015).

Brief COPE consists of three forms: problem-focused, emotion-focused, and avoidance coping. Problem-focused coping is a coping strategy that focuses directly on the source of stress by finding ways to solve the problem or avoid it. Behaviors included in problem-focused coping include stress management, seeking information or assistance to cope, and avoiding stressors (Carroll, 2020). This differs from emotion-focused coping, which focuses on reducing negative feelings caused by stressful situations (Carver et al., 1989). Emotion-focused coping includes self-soothing behaviors, expressing negative emotions (crying), and cognitively avoiding stressful situations (Carver, 2020). Then the final form of coping strategy is avoidance coping, a coping strategy carried out by avoiding things perceived as problems or being in a stressful situation. Individuals with this coping strategy tend to distract themselves from problems either by keeping themselves busy,

seeking an "escape" such as consuming alcohol or drugs, or giving up on the problem (Carver et al., 1989; McCrae & Costa; Roth & Cohen, 1986).

In this study, the Brief COPE was used to identify which coping strategies correlate with financial toxicity in patients with chronic illnesses. By identifying the relationship between these two main variables, this study can provide additional information for similar studies, given the paucity of research on the relationship between financial toxicity and coping strategies in Indonesian individuals. Earlier studies have largely focused on financial toxicity within clinical or patient populations, emphasizing medical costs and treatment adherence, while overlooking its psychological and behavioral correlates in the working population. By integrating psychosocial perspectives on coping mechanisms, this research advances understanding of how financial distress interacts with adaptive and maladaptive coping strategies in a real-life occupational context. The inclusion of demographic analyses based on gender and age further provides new insights into the psychosocial variability of financial toxicity, offering a more comprehensive and contextually relevant view for designing targeted interventions.

Method

This study used a quantitative method with a correlation design approach to examine the relationship between two main variables: financial toxicity and coping strategies. The collected data represent the general population, meaning it can illustrate trends in individuals with chronic illnesses. Participants were recruited using a nonprobability sampling technique with a convenience sampling approach. Researchers selected samples based on their availability and convenience, as well as their perceived representativeness of the characteristics being studied: individuals who were employed, as the productive age group is more vulnerable to changes in financial condition (Kang et al., 2022). Consistent with the definition of chronic illness, participants also had at least one type of chronic illness for more than one year (Centers for Disease Control and Prevention, 2022).

Participants

The sample represented a diverse group of working adults with chronic illnesses, varying across demographic, socioeconomic, and occupational backgrounds. The current

study involved 124 individuals who were workers living with chronic illnesses. After conducting preliminary screening and data analysis, five respondents were excluded for not meeting the inclusion criteria. Therefore, the final dataset consisted of 119 participants (N = 119), with 51% female and 49% male. The participants ranged in age from 20 to over 70 years old, with the largest age group being those aged 50–59 years (27%), followed by participants aged 60–69 years (17%) and 20–29 years (15%). Most participants were from Jakarta (58%), with smaller proportions from Semarang (6%), Bandung (5%), Tangerang (4%), and Yogyakarta (3%). More than half of the participants were married (55%), 37% were single, and 8% were divorced. Regarding educational background, most participants held an undergraduate degree (62%), while others completed high school (24%), diploma (9%), junior high school (3%), and elementary school (2%). The majority were employed as employees (43%), followed by entrepreneurs (21%), students (9%), property and insurance agents (5%), housewives (3%), and retirees (3%). Monthly income levels varied, with 24% earning between Rp 7,100,000–Rp 14,000,000, 20% earning Rp 14,100,000–Rp 30,000,000, and 17% earning above Rp 30,000,000, while others reported lower income brackets (39%).

Instruments

The distributed survey included the COST instrument to measure financial toxicity and the Brief COPE instrument to measure coping strategies. The COST is a self-report instrument consisting of 12 items containing statements related to the patient's finances. The COST instrument uses a Likert scale ranging from 0 (not at all) to 4 (very appropriate), with lower COST scores indicating higher financial toxicity (Carrera et al., 2018; de Souza et al., 2017; de Alcántara Nogueira et al., 2020).

The Brief COPE is a self-report instrument used to measure the frequency of coping strategies used in response to stressful situations, such as financial toxicity, which can impact an individual's health-related quality of life. The Brief COPE consists of 14 independent variable scales, each containing two statement items, resulting in a total of 28 items in the Brief COPE (Bose et al., 2015; Carver, 1997). The Likert scale ranges from 1 (I have never done this at all) to 4 (I do this very often). The highest score indicates the most frequently used coping strategy to deal with stressful situations (Carver et al., 1989; Carver, 1997; Garcia et al., 2018).

To test the reliability of the measuring instrument, researchers used Cronbach's alpha on the trial data. The financial toxicity scale had a reliability index of .86, while the coping strategy scale had a reliability index range of .57 - .68. In both measuring instruments, no items were eliminated because all items had good reliability values. Although the reliability of the Brief COPE scale did not reach .7, according to Nunnally (1978), if it exceeds .5, then the reliability is acceptable. This is because each Brief COPE scale consists of only two items.

Procedures

For the COST instrument, the researcher obtained permission from FACIT to use an Indonesian translation of the assessment instrument, while for the Brief COPE instrument, the researcher translated Carver's (1997) questionnaire. To assess the quality of both instruments, the researcher conducted a validity test using content validity techniques through an expert judgment process conducted by a psychometrician. This expert ensured that the translated items conveyed the same meaning and were easily understood by participants. Furthermore, the expert also reviewed the relevance of the questionnaire items to the constructs being measured.

Before participants proceeded with the survey, they were presented with an informed consent form describing the purpose and procedures of the study. Those who declined to participate were automatically directed to the final section of the questionnaire, while those who agreed were guided to the next section to begin the survey. Instructions for completing the questionnaire were provided at the top of the form to ensure that participants clearly understood the response process before proceeding. The estimated completion time for the questionnaire was approximately 10–20 minutes. Upon reaching the final section of the survey, participants were able to submit their responses by clicking the submit button.

Ethical Considerations

Data collection was conducted using a survey to describe the opinions, behaviors, or characteristics of a population. This research has undergone a Psychological Research Ethics Review through the Nusantara Scientific Psychology Consortium No. 009/2023-Etik/KPIN dated February 23, 2023. The results of this ethics review indicate that this

research can be conducted with controlled risks. Data collection was carried out following the decision from this ethics review.

Data analysis

In presenting the correlation results, researchers used the Spearman's correlation (ϱ) technique to determine the direction of the monotonic relationship between variables, because the data found was not normally distributed. Then, a Mann–Whitney U test was conducted to examine gender differences in financial toxicity and coping strategies among workers with chronic illnesses.

Result

Researchers conducted a descriptive analysis of financial toxicity and coping strategies. For the financial toxicity section, researchers calculated the number and percentage of samples at each level. Then, for coping strategies, researchers calculated the mean and standard deviation (SD) for each dimension.

Table 1.
Descriptive Statistics of Financial Toxicity

Classification	Total Score Range	Mean	SD	n	%	Description
Grade 0	≥26	19,77	8,03	28	24	No impact on quality of life
Grade 1	14-25			67	56	Mild impact on quality of life
Grade 2	1-13			24	20	Moderate impact on quality of life
Grade 3	0			0	0	High impact on quality of life

Based on the data obtained, it was found that the average total score (mean) for financial toxicity was 19.77 with a standard deviation (SD) of 8.03. Of the 119 participants, 55 individuals had a total score above the average, and 64 individuals had a total score below the average. Based on the classification of D'Rummo et al. (2019), the highest level of financial toxicity in this study was Grade 1, with a score range of 14-25, with 67 individuals (56%). This means that the 67 individuals who experienced financial toxicity had a mild impact on their quality of life. It was also found that none of the study samples felt a significant impact of financial toxicity on their quality of life.

Table 2.
Descriptive Statistics of Coping Strategy

Coping Strategy Type	Mean	SD	Total Item
Avoidance coping			
Self-distraction	5.79	1.43	
Denial	3.08	1.6	8
Substance use	2.92	1.53	
Behavioral disengagement	3.79	1.64	
Problem-focused coping			
Active coping	6.22	1.44	
Instrumental support	6.02	1.42	8
Planning	5.7	1.44	
Positive reframing	5.64	1.36	
Emotional-focused coping			
Emotional support	5.97	1.3	
Venting	4.88	1.53	
Self-blame	3.74	1.86	16
Acceptance	6.63	1.34	
Religion	5.61	2.14	
Humor	4.52	1.96	

Looking at the data in Table 2, it is known that acceptance has the highest average value, at 6.63. Meanwhile, the substance use dimension has the lowest average value, at 2.92. This means that, of all dimensions, the sample tends to use acceptance as a coping mechanism, while the substance dimension tends to be used less frequently. This also means that the majority of the study sample has accepted their condition of having to live with their illness, with a small number choosing to use alcohol or drugs as a coping strategy.

To test the normality of the data distribution, the researcher used Shapiro-Wilk to test the normality of the data distribution. Based on these calculations, it was found that the distribution of this research data was not normal because no variable reached the p limit > .05. The Shapiro-Wilk of the financial toxicity variable and 14 coping strategy dimensions ranged from .67 to .97, while the p-value found for the financial toxicity variable was .012, while for all coping strategy dimensions it was < .001. The following describes the calculation.

Table 3.
Analysis of the Relationship Between Financial Toxicity and Coping Strategies

Variable		**Financial Toxicity**
1. Financial Toxicity	Spearman's rho	—
	p-value	—
2. Self-distraction	Spearman's rho	-.075
	p-value	.415
3. Denial	Spearman's rho	-.144
	p-value	.118
4. Substance use	Spearman's rho	.098
	p-value	.287
5. Behavioral disengagement	Spearman's rho	-.258**
	p-value	.005
6. Active coping	Spearman's rho	.116
	p-value	.207
7. Instrumental support	Spearman's rho	-.138
	p-value	.133
8. Planning	Spearman's rho	.228*
	p-value	.013
9. Positive reframing	Spearman's rho	.057
	p-value	.541
10. Emotional support	Spearman's rho	-.133
	p-value	.149
11. Venting	Spearman's rho	.042
	p-value	.648
12. Self-blame	Spearman's rho	.025
	p-value	.787
13. Acceptance	Spearman's rho	.006
	p-value	.951
14. Religion	Spearman's rho	-.07
	p-value	.451
15. Humor	Spearman's rho	.06
	p-value	.517

* p < .05, ** p < .01, *** p < .001

In Table 3, several dimensions have a negative correlation with financial toxicity. Therefore, when a sample's financial toxicity is high, these dimensions tend to decrease, and vice versa. Furthermore, the behavioral disengagement and planning are significantly correlated with financial toxicity. This indicates that the sample tends to give up on facing the root of the problem. This strategy is considered effective in reducing the sample's mental burden, as it allows them to focus less on their illness and allows them to enjoy life

more. Furthermore, the sample who used planning as a coping strategy tended to consider the stages and best ways to deal with their problems. As patients with chronic illnesses, the sample may consider the best and most appropriate treatment for their condition.

The researchers then conducted additional analysis to examine the correlation between financial toxicity and coping strategies, based on age. They used Spearman's correlation to determine the relationship between variables and the sample's age. The following is a presentation of the results:

Table 4.
Analysis of the Relationship Between Financial Toxicity and Coping Strategies Based on Age

Variable		**Age**
1. Age	Spearman's rho	—
	p-value	—
2. Financial Toxicity	Spearman's rho	-.007
	p-value	.94
3. Self-distraction	Spearman's rho	-.253**
	p-value	.006
4. Denial	Spearman's rho	-.117
	p-value	.207
5. Substance use	Spearman's rho	-.149
	p-value	.105
6. Behavioral disengagement	Spearman's rho	.01
	p-value	.913
7. Active coping	Spearman's rho	-.086
	p-value	.353
8. Instrumental support	Spearman's rho	-.072
	p-value	.435
9. Planning	Spearman's rho	-.071
	p-value	.445
10. Positive reframing	Spearman's rho	-.055
	p-value	.549
11. Emotional support	Spearman's rho	-.183*
	p-value	.047
12. Venting	Spearman's rho	-.304***
	p-value	< .001
13. Self-blame	Spearman's rho	-.197*
	p-value	.032
14. Acceptance	Spearman's rho	.022
	p-value	.815
15. Religion	Spearman's rho	.098
	p-value	.287
16. Humor	Spearman's rho	-.302***

Variable		Age
	p-value	< .001

* p < .05, ** p < .01, *** p < .001

When viewed from the sample's age factor, financial toxicity and the majority of coping strategy dimensions had a negative correlation. However, only the behavioral disengagement, acceptance, and religion dimensions had a positive correlation. Furthermore, the self-distraction, emotional support, venting, self-blame, and humor dimensions were negatively significant correlated with age, such that as the sample's age increased, these dimensions decreased. As the sample's self-distraction decreased, they were able to face their illness without preoccupying themselves with other things. As the sample's age increased, the emotional support they received was less helpful in coping. When their venting decreased, they were able to face their illness without venting their negative emotions. The sample could go about their daily lives without blaming themselves for their illness. As they aged, those with high levels of financial toxicity no longer treated their illness as a joke.

To test for differences in variables based on gender, researchers used a non-parametric for independent t-test, Mann-Whitney because it was known that there were differences in variance. The results of this calculation are described below.

Table 5.
Analysis of the Relationship Between Financial Toxicity and Coping Strategies Based on Gender

Variable	Male			Female			Mann-Whitney (W)	p-value
	N	Mean	SD	N	Mean	SD		
Financial Toxicity	58	19.397	7.334	61	20.131	8.686	174.3	.894
Self-distraction	58	5.81	1.504	61	5.77	1.359	1783.5	.939
Denial	58	2.966	1.486	61	3.197	1.701	1644	.468
Substance use	58	3.207	1.694	61	2.656	1.302	2082.5	.046*
Behavioral disengagement	58	3.707	1.707	61	3.869	1.586	1653.5	.53
Active coping	58	6.345	1.551	61	6.098	1.325	2003	.203
Instrumental support	58	6.172	1.365	61	5.869	1.466	2005.5	.198
Planning	58	6.034	1.475	61	5.377	1.344	2232	.012*
Positive reframing	58	5.31	1.245	61	5.951	1.407	1247	.004*

Variable	Male			Female			Mann-Whitney (W)	p-value
	N	Mean	SD	N	Mean	SD		
Emotional support	58	5.897	1.165	61	6.033	1.426	1633	.457
Venting	58	4.966	1.578	61	4.803	1.481	1865.5	.603
Self-blame	58	3.983	2.004	61	3.508	1.689	1965.5	.282
Acceptance	58	6.724	1.308	61	6.541	1.373	1895	.488
Religion	58	5.121	2.241	61	6.082	1.943	1348	.023*
Humor	58	4.81	1.951	61	4.246	1.946	2064	.113

* p < .05, ** p < .01, *** p < .001

The results of these calculations indicate that the planning, positive reframing, religion, and substance use scales, have a significant correlation. It appears that substance use and planning were used more frequently by the male sample, while religion and positive reframing were used more frequently by the female sample. Men tend to focus on what needs to be done to overcome or avoid problems, while women tend to use coping strategies that involve their beliefs to be more positive in facing problems.

Discussion

Based on the calculation using Jeffreys's Amazing Statistics Program (JASP) software, it was found that, out of 14 Brief COPE dimensions, only behavioral disengagement and planning correlated significantly with financial toxicity. Behavioral disengagement is a coping strategy involving giving up on goals and detaching from stressful situations. Patients with chronic illnesses who use this strategy will reduce their efforts to deal with financial burdens by postponing or stopping necessary treatment. This strategy is adopted when individuals feel powerless to overcome their problems, and patients may consequently feel hopeless in the face of the financial burden associated with the cost of their treatment (Carver et al., 1989; Lazarus & Folkman, 1984).

Planning is a coping strategy that involves preparing a plan of action and how to handle it. Generally, planning occurs before individuals engage in active coping. In patients with chronic illnesses, planning can have a positive impact on their lives. This includes setting goals, managing expenses, and developing treatment strategies (Aren et al., 2017; Carver et al., 1989).

The previous research by Thom and Benedict (2019) showed that disengaging from

financial problems can lead to an increase in anxiety and depression symptoms, as well as worsening financial toxicity in patients. However, this study found that behavioral disengagement and financial toxicity are negatively correlated. Therefore, the more often the sample used this coping strategy, the lower their likelihood of experiencing financial toxicity. Behavioral disengagement is known to reduce stress when facing stressful situations. It also helps individuals to temporarily detach from stressful situations, thereby improving their mood and readiness to face them. Additionally, planning was positively correlated with financial toxicity. Therefore, the more frequently the sample planned their financial strategies, the greater their likelihood of experiencing financial toxicity. This coping strategy is rigid and inflexible, which makes it difficult for users when situations do not go as expected. This can lead to increased stress, distress, and financial toxicity (Carrera et al., 2018; Gharzai et al., 2021; Roth & Cohen, 1986; Sanders & Lamb, 2014).

Based on the results obtained, the researchers found no significant correlation between emotion-focused coping and financial toxicity, as behavioral disengagement stems from avoidance coping, while planning stems from problem-focused coping. This may be because emotion-focused coping strategies focus on managing emotional distress rather than addressing their financial problems directly. Several other studies involving emotion-focused coping as a strategy also showed no significant correlation with financial burden (Kalfoss et al., 2019). While behavioral disengagement and planning produced significant correlations with financial toxicity, it can be concluded that there is no relationship between financial toxicity and coping strategies. This is because the values of both did not exceed the expected correlation coefficient limit. Therefore, although both were significant, they were considered negligible correlations.

The researchers conducted an additional analysis examining the correlation between financial toxicity and coping strategies in relation to other factors. The relationship between variables was examined by looking at age and gender as factors. Examining the relationship between age and the main variables deepens the understanding of psychosocial development among individuals with chronic illnesses, such as whether financial stress decreases with age or whether coping patterns become more adaptive over time. Likewise, assessing gender differences in coping strategies and financial toxicity helps reveal distinct psychological and social patterns within this

population. These insights provide valuable implications for designing gender- and age-sensitive interventions, such as differentiated approaches to financial counseling or coping skills training, ultimately supporting more tailored and effective psychosocial care for workers living with chronic diseases. The calculations revealed that only the behavioral disengagement, acceptance, and religion dimensions had a positive correlation with financial toxicity, while the other dimensions had a negative correlation. Of the 14 Brief COPE dimensions, five had significant correlations: self-distraction, emotional support, venting, self-blame, and humour. Based on the obtained data, it can be concluded that these five dimensions tend to decrease with increasing age, and vice versa.

The data obtained showed that older participants were less likely to distract themselves. Patients with chronic illnesses tend to cope their financial burdens, rather than distract themselves. One study found that older individuals may need interaction with others to exchange ideas, but they also face limitations in social activities due to age. This is particularly true for those with chronic illnesses (Carver et al., 1989; Mikulionienė et al., 2019). As they age, emotional support becomes less effective in helping them cope with the burden of care. Furthermore, they are less likely to express their dissatisfaction or sadness about their financial problems to others (Carver et al., 1989; Lentz et al., 2019).

As they age, participants also tend to have lower self-blame when faced with financial toxicity. Patients with chronic illnesses experiencing financial toxicity do not blame their illness or themselves for the impact of their financial burden. Low levels of self-blame can help participants reduce negative emotions related to existing problems (Hooker, 2013). As individuals age, their sense of humour decreases. They no longer joke excessively about their illness, as this can disrupt their well-being. They also begin to recognise that their chronic illness is a serious matter (Jiang et al., 2020).

Based on the five significant dimensions, self-distraction is a form of avoidance coping strategy, while the other four dimensions are emotion-focused. This is consistent with previous research suggesting that older individuals with greater life experience are more likely to use emotion-focused coping strategies when facing stressful situations. They also use problem-focused coping strategies less frequently, as resources for coping with stressors decrease with age, particularly among chronic illness patients, who may have functional and social limitations (Chen et al., 2017).

Younger patients with chronic illnesses tend to be more vulnerable to financial toxicity than older age groups. This vulnerability stems from patients' tendency to avoid care and their poor psychosocial well-being (Esselen et al., 2020; Thom & Benedict, 2019; Thom et al., 2021). This can be seen in the results of this study, where the largest sample age group is 50–59 years old, with 32 people (17%), followed by 20–29 years old with 30 people (25%), and the oldest age group with the fewest people, just four (3%).

The researchers conducted a differential test of financial toxicity and coping strategies based on gender among patients with chronic illnesses. Based on the data obtained, it was found that females had a higher mean than males. Furthermore, the planning, positive reframing, religion, and substance use dimensions were significantly correlated regarding coping strategies. The planning dimension had a higher percentage of male participants than female participants. Similarly, the substance use dimension had a higher percentage of male participants. Planning, which stems from problem-focused coping, and substance use, which stems from avoidance coping, suggest that men tend to use coping strategies that aim to change the situation. Patients with chronic illnesses strive to obtain the best treatment given their financial situation. However, when they feel there is no other option, they may use alcohol and drugs to cope with the stress (Cholankeril et al., 2023; Oppegaard et al., 2020).

On the positive reframing and religion dimensions, female participants were significantly higher than male participants. Both dimensions are used to modify emotional responses to stressful situations. Women who use positive reframing as a coping strategy tend to have lower anxiety levels. Those who use positive reframing interpret financial burdens positively. Furthermore, those who use religion as a coping strategy tend to seek spiritual comfort and interpret their experiences with stressors. These findings align with Pulla's (2019) study, which states that women tend to use emotion-focused coping strategies to address their problems. Therefore, it is not surprising that more female participants chose these two strategies to deal with financial toxicity (Cholankeril et al., 2023; Oppegaard et al., 2020; Pulla, 2019).

This finding is supported by a study conducted by Oppergaard, Dunn, Kober, Mackin, Hammer, Conley, Levine, and Miaskowski (2020), who found that women scored higher on the positive reframing and religion dimensions, while men scored higher on the

substance use dimension. However, no significant gender differences were found on the planning dimension. Nevertheless, Cholankeril, Xiang, and Badr (2023) found that, during COVID-19, women tended to use planning as a coping mechanism more frequently than men did. However, no significant gender differences were found in the use of religion as a coping mechanism (Cholankeril et al., 2023; Oppegaard et al., 2020). The difference in results between this study and that of Cholankeril et al. (2023) is suspected to be due to differences in context. The Cholankeril study observed coping strategies and anxiety symptoms during the lockdown, while this study examined financial toxicity and coping strategies in patients with chronic illnesses. These differences in context can influence the study's findings through the use and effectiveness of these coping strategies (O'Rourke et al., 2022). In this study, participants imagined strategies for coping with illness; in the study by Cholankeril et al., participants imagined strategies for coping with anxiety during the lockdown.

Conclusion

This study found no relationship between financial toxicity and coping strategies among working patients with chronic illnesses. While the behavioral disengagement and planning dimensions appeared to correlate significantly with financial toxicity, the scores did not go beyond the expected limits of correlation. Both dimensions illustrate the tendency of the study sample to temporarily give up and then develop strategies to address the problem. As the participants aged, they no longer shifted their attention from problems or blamed themselves for them. They also no longer vented their negative emotions to others or relied on emotional support to cope. As they aged, the participants understood that their illness was serious and no longer treated it lightly. Male participants tended to focus on changing their situation, while female participants tended to view their situation positively to reduce stress. Future researchers could use qualitative or mixed methods to gain more information by asking open-ended questions. Through this exploration, researchers could also understand participants' emotions when discussing the research problem. Researchers can more easily understand quantitative research results and interpret them more accurately by combining quantitative and qualitative methods. In addition to providing readers with more information, this research could be packaged as

psychoeducation on coping strategies that readers facing similar issues can try according to their age or gender. The information could also be presented as an intervention program for patients with chronic illnesses who need professional guidance regarding their financial situation and well-being.

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