

Situational Factors Related to Burnout Among Employees at PT. X

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ARTICLE INFO

Article history:

Received 09 December 2025

Accepted 12 December 2025

Keywords:

Burnout;

Situational Factors;

Pharmaceutical Industry

ABSTRACT

Pharmaceutical companies such as PT. X have high-pressure work environments with strict quality standards. Preliminary studies show that 22.2% of workers experience burnout, and most workers show high levels of emotional exhaustion and low professional efficacy. These conditions reflect the high potential for burnout in the workplace. Burnout not only affects performance and psychological well-being, but also physical health. Therefore, this study aims to identify factors associated with burnout among workers at PT. X. This study used a cross-sectional design with total sampling techniques on 113 workers in 10 departments at PT. X. The instruments used included MBI-GS, COPSOQ III core version, and a questionnaire on respondent characteristics. Data collection was conducted through self-administered questionnaires, and data analysis was performed using univariate and bivariate analysis with the Chi-Square test. The frequency of employees at PT. X experiencing burnout was 37.2%, covering the burnout stage and habitual burnout. Significantly related situational factors included workplace demands ($p=0.001$; $OR=4.074$), work organization and job content ($p=0.043$; $OR=2.438$), and interpersonal relationships and leadership ($p=0.013$; $OR=3.067$). A total of 37.2% of workers at PT. X in 2025 experienced burnout. The related situational factors were workplace demands, work organization and job content, and interpersonal relationships and leadership.

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INTRODUCTION

Burnout has become a phenomenon that has received considerable research attention over the past 50 years.

However, burnout remains a contemporary problem due to continuous environmental pressures and challenges for workers and organizations as a whole (1). The 11th edition of the International Classification

of Diseases (ICD-11) includes burnout as a factor that affects a person's health or causes a person to seek health services (2). The term burnout was first explored in 1974 by Herbert Freudenberger, who described it as emotional and psychological stress experienced by workers (3).

The American Psychological Association states that workers in the United States are experiencing increased burnout (4). A survey found that 44% of 1,405 workers in the United States experienced work-related burnout (5). Another survey revealed that 48% of workers in Australia, Canada, France, Germany, India, Japan, the United Kingdom, and the United States experience burnout (6). In addition, the average prevalence of burnout among workers in four Southeast Asian countries is 62.91% (7). Indonesia has a higher rate than the average, at 63.78% (7). Furthermore, the 2024 Manulife Asia Carey Survey revealed that 56% of Indonesians consider burnout to be the most worrying mental health disorder (8).

Burnout is a psychological syndrome that arises as a long-term response to workplace stressors (9). This condition is characterized by emotional exhaustion that leaves individuals feeling extremely physically and mentally tired, cynical attitudes, reduced involvement and concern in the work environment, and feelings of being unable to complete work properly. This condition not only reduces work motivation and impacts performance (10) but can also affect psychological health, such as triggering sleep disorders, anxiety, and depression. When chronic, burnout often causes physical complaints and increases the risk of chronic diseases, such as type 2 diabetes mellitus, hypercholesterolemia, and cardiovascular disorders, due to disruption of the body's stress system, including HPA axis dysregulation, increased cortisol levels, and chronic inflammatory activation (11–13).

Situational factors related to psychosocial factors in the workplace are factors that can trigger burnout (14), namely workplace demands, work organization and job content, interpersonal relationships and Leadership, work-individual interactions, and trust and relationships within the organization (15,16).

Burnout can affect workers across sectors, including the pharmaceutical industry, which has a high-pressure work environment, demanding schedules, and strict quality standards that can contribute to burnout (17). PT. X is a company engaged in the pharmaceutical industry with activities including the manufacture of pharmaceutical products for the local and export markets, the completion of labels for the local market in accordance with local market requirements, pharmaceutical warehousing, and a diagnostics and nutrition division. Through its manufacturing activities, PT. X strives to support everyone in achieving optimal health at every stage of life by providing nutritional and diagnostic products as well as medical care and pharmaceutical therapy. It illustrates the challenges workers face, which ultimately contribute to burnout triggers.

A preliminary study was conducted through interviews and questionnaires. The results of an interview with the EHS Supervisor of PT. X's Department on March 19, 2025, described the work challenges faced by workers and indications of potential burnout in the work environment. During the interview, the EHS Supervisor stated, "As workers in the pharmaceutical industry, we are not only physically demanding, but also emotionally demanding." This is due to the need to work meticulously to meet strict quality control standards.

Meanwhile, the results of a preliminary study conducted on nine workers at PT. X showed that 22.2% of workers experienced burnout. Furthermore, it was found that overall, 55.6% of respondents experienced high levels of emotional exhaustion, 33.3% showed high cynicism, and 44.4% had low professional efficacy. However, only a small percentage experienced burnout; the high levels of emotional exhaustion and low professional efficacy indicate a potential for more widespread burnout risk.

This condition underscores the importance of addressing burnout in the pharmaceutical industry, which is often characterized by high workloads and continuous emotional pressure. However, the lack of data and research on burnout factors in Indonesia, particularly in the pharmaceutical industry,

underscores the need for further attention. Therefore, this study was conducted to determine the situational factors related to burnout among workers at PT. X in 2025.

METHODS

This study used a quantitative, descriptive-analytical, cross-sectional design. The research was conducted from March to July 2019 at PT: X, a pharmaceutical company in Indonesia. The research population consisted of 113 workers in 10 departments at PT. X, namely the Production, Engineering, Environmental Health & Safety, Technical Service, Warehouse, PPIC, Finance, Quality Operation, Quality System, and Quality Control departments. The sampling technique used was total sampling. The inclusion criteria were permanent and contract workers from the 10 departments who had worked for at least 6 months and were willing to be respondents. Meanwhile, the exclusion criteria were production workers directly involved in the manufacturing process, OB, contractors, security, distribution drivers, catering staff, and students or interns.

This research used primary data collection methods. Data collection was conducted using self-administered questionnaires. The instruments used in this study included the Maslach Burnout Inventory–General Survey (MBI-GS) to measure burnout levels based on quintiles of total scores, which were divided into five stages of burnout development: honeymoon, onset of stress, chronic stress, burnout, and habitual burnout. These stages were then categorized into three groups, namely: burnout (burnout and habitual burnout stages), burnout symptoms (onset of stress and chronic stress stages), and no burnout (honeymoon stage). In the bivariate analysis, the burnout and non-burnout categories were combined into a single group, yielding two final categories: burnout and non-burnout. Meanwhile, the instrument used to measure situational factors was the core version of COPSOQ III. In addition, the researchers used questionnaires tailored to their needs to collect data on respondent characteristics.

Data analysis was performed univariately for each

variable. Meanwhile, bivariate tests used the Chi-square test to examine relationships among situational variables, including demands at work, work organization and job content, interpersonal relationships and Leadership, work and individual interactions, and trust and relationships within the organization. This study received ethical approval number Un.01/F.10/KP.01.1/KE.SP/04.08.007/2025 issued by the Health Research Ethics Commission of the Faculty of Health Sciences, UIN Syarif Hidayatullah Jakarta.

RESULT AND DISCUSSION

Result

The results of the univariate analysis in Table 1 show that 42 workers (37.2%) at PT. X was found to experience burnout, including stages and habitual burnout. The distribution of respondent characteristics shows that most workers are over 30 years old (53.1%), male (58.4%), highly educated (66.4%), married (62.8%), have fewer than two children (69.9%), and have less than 10 years of service (60.2%).

Meanwhile, the distribution of situational factors shows that most workers at PT. X feels high demands at work (50.4%), unsupportive work organization and job content (53.1%), unsupportive interpersonal relationships and Leadership (57.5%), unsupportive work and individual interactions (54.9%), and unsupportive trust and relationships within the organization (61.9%).

Table 2 shows the results of bivariate analysis with burnout, indicating that 52.6% of workers with high job demands experienced burnout. The chi-square test results yielded a p-value of 0.000 (<0.05), indicating a significant relationship between workplace demands and burnout. Workplace demands have an OR value of 4.074, indicating that workers with high job demands are almost 5 times more likely to experience burnout than workers with low job demands.

Work demands, including quantitative demands, work pace, and emotional demands, are organizational characteristics that can put pressure on workers and

become situational factors related to burnout. This study also shows that most workers often feel they have to work very quickly (40.7%). This suggests that work pace is a dominant aspect of workplace demands for workers and can contribute to the risk of burnout. In addition, 73.7% of workers with high workplace demands also feel that interpersonal relationships and Leadership are not supportive. This indicates a lack of social support in the work environment for workers under high demand, which may increase the risk of burnout.

Discussion

The results of this study are in line with previous studies showing that job demands are significantly associated with an increased risk of burnout (p-value<0.001) (18). Similar results were found in other studies showing a significant positive relationship between job demands and burnout (p-value<0.01) (19). Job demands can increase the risk of burnout by exceeding workers' capabilities or resources, leading to prolonged stress. Without control over their work or adequate social support, workers find it difficult to recover from work stress, causing chronic fatigue to develop into burnout.

Workers in unsupportive work organizations and with job content that was not supportive experienced burnout at a rate of 46.7%. The chi-square test yielded a p-value of 0.043 (<0.05), indicating a significant relationship between work organization, job content, and burnout. Work organization and job content had an OR of 2.438, indicating that workers with unsupportive work organization and job content were almost three times as likely to experience burnout as those with supportive work organization and job content.

Work organization and job content, including influence at work, opportunities for development, and job meaning, are organizational characteristics that can be related to burnout. In this study, the distribution of responses on the work organization and job content variables showed that 9.7% of workers rarely influenced decisions related to their work. In addition, 53.3% of workers in unsupportive

work organizations and those with high job content also feel high work demands. This condition indicates an imbalance between high work demands and unsupportive work organizations and job content, which can increase the risk of burnout.

The results of this study are in line with previous studies showing that job resources, which align with work organization and job content, are significantly negatively related to burnout (p-value < 0.001) (20). Thus, when job resources are less supportive, burnout will be higher. Similar results were found in other studies showing that job resources have a significant negative relationship with burnout in emergency medical personnel (21). Job resources are aspects of work that encourage personal growth, learning, and professional development. However, when available job resources are inadequate, workers lose important coping tools for high work demands. This imbalance can lead to increased stress, decreased motivation, and ultimately a higher risk of burnout.

Workers with unsupportive interpersonal relationships and Leadership experienced burnout at a rate of 47.7%. The chi-square test results yielded a p-value of 0.013 (<0.05), indicating a significant relationship between interpersonal relationships, Leadership, and burnout. Interpersonal relationships and Leadership have an OR of 3.067, indicating that workers with unsupportive interpersonal relationships and Leadership are almost 4 times more likely to experience burnout than those with supportive interpersonal relationships and Leadership.

Interpersonal relationships and Leadership, including recognition, role clarity, role conflict, Leadership quality, social support from superiors, social support from coworkers, and a sense of belonging in the workplace, are organizational characteristics that can be situational factors related to burnout. In this study, the distribution of responses on the interpersonal relationships and Leadership variables showed that 8% of workers rarely felt that their work was recognized and appreciated by management. This finding indicates that appreciation for work is not felt equally by all workers, where a lack of recognition from management can reduce work motivation and, in the

long term, increase the risk of burnout.

This study aligns with previous studies showing that all dimensions in the interpersonal relationships and Leadership domains, such as predictability, recognition, role clarity, role conflict, social support, sense of community, and quality of Leadership, are significantly related to burnout (p-value < 0.01) (22). Similar results were found in another study, which showed that fair and supportive Leadership has a significant negative relationship with burnout (p-value < 0.001) (23). Support from coworkers and superiors, a sense of fairness, and fair and supportive Leadership help workers cope with work pressure more adaptively. Conversely, strained relationships among colleagues or unfair, unsupportive Leadership, in both work planning and conflict resolution, can reduce workers' ability to cope with job demands, ultimately increasing the risk of burnout.

Workers with unsupportive jobs and individual interactions experienced burnout at a rate of 41.9%. The chi-square test yielded a p-value of 0.337 (> 0.05), indicating no significant relationship between job and individual interactions and burnout.

Work and individual interactions include job insecurity, insecurity about working conditions, job satisfaction, and work-life conflict. This study found that 31% of workers were concerned about finding a new job if they lost their current one. However, 47.8% of workers were satisfied with their job overall. This shows that, despite concerns about job insecurity, most workers remain satisfied with their jobs overall. This is also supported by data showing that 72.5% of workers who feel that job and individual interactions are supportive come from highly educated groups. Thus, higher levels of education tend to shape positive perceptions of work, thereby mitigating concerns about job insecurity.

The results of this study are in line with previous studies showing that there is no significant relationship between work burnout and job insecurity, which is one of the dimensions of work and individual interactions (p-value=0.271) (24). Similar results were found in other studies showing that work-to-family conflict is not significantly related to

burnout (p-value>0.05) (25). A culture that views work as a responsibility for family welfare can influence how individuals respond to work pressure, so that it does not always lead to burnout, as it is still considered beneficial. Meanwhile, job insecurity or uncertain working conditions are often considered normal and can be overcome through skills and adaptation, so they do not necessarily become sources of burnout stressors.

40% of employees with low trust in the organization and poor relationships within it experienced burnout. The results of the chi-square test showed a p-value of 0.552 (p-value > 0.05), indicating no significant relationship between trust and relationships within the organization and burnout.

Trust and relationships within the organization include vertical trust and organizational justice. This study found that 53.1% of workers felt that conflicts were resolved fairly. However, 7.1% of workers stated that only a small portion of work was distributed fairly, indicating that the division of labor was still not perceived as even by workers. In addition, 67.4% of workers with less supportive trust and relationships within the organization did not experience burnout. This shows that low trust and relationships within the organization are not always directly related to burnout, or that other factors may be more dominant in influencing burnout levels among workers.

The results of this study are in line with previous studies showing that there is no significant relationship between burnout and organizational trust (26). However, the results of this study are not consistent with most previous studies, which show that trust and relationships within the organization are related to burnout. One example is a study that found a significant negative relationship between perceptions of organizational trust and burnout levels among operating room nurses (p-value = 0.001) (27).

CONCLUSION

In 2025, 37.2% of employees at PT. X experienced burnout, which included burnout and habitual burnout stages. Based on the analysis of situational factors on burnout among employees at PT. In 2025, it was found

that situational factors, including workplace demands, work organization, and job content, as well as interpersonal relationships and Leadership, are related to burnout.

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Table 1. Results of Univariate Analysis of Burnout, Respondent Characteristics, and Situational Factors

No	Variable	n	%
1	Burnout		
	Yes	42	37,2%
	No	71	62,8%
Individual Characteristics			

No	Variable	n	%
2.	Age		
	≤30 Years Old	53	46,9%
	>30 Years Old	60	53,1%
3.	Gender		
	Female	47	41,6%
	Male	66	58,4%
4.	Education Level		
	Higher Education	75	66,4%
	Secondary Education	38	33,6%
5.	Marital Status		
	Unmarried/Not Yet	42	37,2%
	Married	71	62,8%
6.	Number of Children		
	≥2 Children	34	30,1%
	< 2 Children	79	69,9%
7.	Length of Service		
	<10 Years	68	60,2%
	≥10 Years	45	39,8%
Situational Factors			
8.	Work Demands		
	High	57	50,4%
	Low	56	49,6%
9.	Work Organization and Job Content		
	Less Supportive	60	53,1%
	Supportive	53	46,9%
10.	Interpersonal Relationships and Leadership		
	Less Supportive	65	57,5%
	Supportive	48	42,5%
11.	Work and individual interactions		
	Less supportive	62	54,9%
	Supportive	51	45,1%
12.	Trust and relationships within the organization		
	Less supportive	70	61,9%
	Supportive	43	38,1%

Table 2. Results of Statistical Analysis of the Relationship between Situational Factors and Burnout

Variable	Burnout		p-value	OR	95 % CI	
	Yes	No			Lower	Upper
Work demands						
High	30 (52,6%)	27 (47,4%)	0,001*	4,074	1,789	9,280
Low	12 (21,4%)	44 (78,6%)				
Work organization and job content						
Less supportive	28 (46,7%)	32 (53,3%)	0,043*	2,438	1,102	5,391
Supportive	14 (26,4%)	39 (73,6%)				
Interpersonal relationships and Leadership						
Less supportive	31 (47,7%)	34 (52,3%)	0,013*	3,067	1,336	7,038
Supportive	11 (22,9%)	37 (77,1%)				

Variable	<i>Burnout</i>		<i>p-value</i>	OR	95 % CI	
	Yes	No			Lower	Upper
Work and Individual Interactions						
Less Supportive	26 (41,9%)	36 (58,1%)	0,337	1,580	0,726	3,437
Supportive	16 (31,4%)	35 (68,6%)				
Trust and Relationships within the Organization						
Less Supportive	28 (40,0%)	42 (60,0%)	0,552	1,381	0,622	3,065
Supportive	14 (32,6%)	29 (67,4%)				