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ORIGINAL ARTICLE

Factors Affecting Return to Work Readiness: A Study on Chronic Disease Patients and Business Owners in Indonesia 2022

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ABSTRACT

Introduction: The return to work of all workers suffering from occupational diseases and work-related injuries is regulated by the Indonesian government. This does not apply to employees with nonwork-related chronic illnesses. Workers with chronic illnesses often encounter many obstacles when returning to work, greatly affecting their intention to return to work. Therefore, this study aimed to determine the factors that could affect work readiness among patients with chronic diseases and business owners. **Methods:** This was a cross-sectional study. The study population included all patients with chronic disease in Indonesia. The research sample used a simple random sampling technique, comprising 332 people. Data were analyzed using ordinal logistic regression tests. **Results:** There was an effect of 17.1% between age, gender, marital status, years of service, and employment status on the return to work readiness of patients with chronic diseases. The type of company and the presence of employees with chronic diseases in the company can affect the return to work readiness of business owners by 25.4%. **Conclusion:** Based on this finding, special support from different sectors such as governments, non-governmental organizations, and awareness raising by businesses for people with chronic diseases is needed so that they can return to work. It's ready.

Keywords: business owner, chronic disease, return-to-work

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INTRODUCTION

When entering a productive age, individuals are often associated with the work and social spheres. At this productive age, many individuals experience chronic diseases. Based on secondary data from the Ministry of Health of the Republic of Indonesia for 2018, the prevalence of chronic disease in Indonesia is 7,575,399 people who are on average of productive age (Ministry of Health of the Republic of Indonesia, 2018). The phenomenon of domination of the age range of cancer patients in the productive age range was clarified by research data from the Health Research and Development Agency Balitbangkes in 2019, which states that there has been an increase in the trend of Non-Communicable Diseases (PTM) followed by a shift in disease patterns (Ministry of Health, 2020). According to WHO, PTM is also a chronic disease whose treatment requires a long duration and has genetic, physiological, lifestyle, and environmental risk factors (World Health Organization, 2021).

According to the World Health Organization (WHO), chronic disease occurs for a long duration, which generally develops slowly and has a minimum treatment duration of 6 months (World Health Organization, 2005). It is well known that patients with chronic diseases generally face different challenges from patients with general illnesses,

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so they require different treatments (Shim *et al*., 2019). Different types of adaptation gaps exist in working patients. According to preliminary survey data conducted by Inspiration, a patient health support platform in 2021. According to the results of this study, the main chronic diseases occurring in working-age individuals are cancer, heart disease, diabetes mellitus, pulmonary hypertension, chronic obstructive pulmonary disease, autoimmune disease, thyroid disease, cysts, gastroesophageal reflux disease (GERD), and asthma.

According to the World Development Report, return to work is a new phenomenon that occurs in patients with chronic diseases in the productive age range (World Bank, 2019). Previous research on cancer patients has proven that the more mature the patient, the more able it is to accept external factors (role, acceptance of conditions, and risk of receiving a diagnosis throughout their lifetime) to accelerate survival and be able to resume their roles and return to work (White *et al*., 2014). The results of this study were also supported by other studies that found that external factors, such as factors related to work and social support, can help patients return to work (Aryaningtyas, 2021).

The return-to-work program is important for patients with chronic diseases, families, and communities. Patients with chronic diseases often perceive return to work as a sign of complete recovery. Instead, returning to work can restore normal life due to the long treatment time for the disease. The duration of chronic disease treatment is long and costly enough to make chronic disease patients at a productive age, still actively working, and after the treatment of their disease will return to work. Previous research has stated that returning to work is a psychological process when workers receive treatment for their conditions and the result of returning workers to the work environment after undergoing treatment for their physical disability (Muthoharoh and Wibowo, 2021). From the explanation above, it is known that there are still not many studies or government policies related to return-to-work for chronic disease patients in Indonesia.

The return-to-work program carried out by BPJS Employment since 2015, which is a series of procedures for handling cases of work accidents and work-related illnesses (accidents), uses the term return-to-work but does not have return-to-work facilities for patients with chronic illnesses. The BPJS Employment Return to Work Program focuses on health services, rehabilitation, and training so that workers can return to work (Siregar, 2017). This programme did not include workers with chronic illnesses. Therefore, there is a need for community services related to chronic patient return-to-work programs to ensure the fundamental rights of workers and that laws and regulations are enacted to ensure equal opportunity and non-discrimination for working patients (Agusmidah, 2010).

According to Law Number 13 of 2003 on Employment, protection of workers shall ensure the basic rights of workers and guarantee equal opportunities and treatment without discrimination on any grounds to protect the welfare of workers. Workers and their families perceive the advancement of the business world (Schultz and Gatchel, 2015). Currently, regulations in Indonesia provide full protection for many vulnerable groups, but for groups of workers with chronic diseases, they are still far from reaching them. Based on a preliminary study, most of those who experienced this chronic disease were workers of productive age. You can imagine a wider impact if these workers with physical limitations and also the mental pressure they have to experience have to experience discrimination and even losing their jobs will cause bigger problems, especially related to the quality of life of families of workers with chronic illnesses.

Regulations related to the protection of health problems for workers to date have focused only on workers who experience Occupational Diseases. Workers with disabilities, female workers, and workers who are underage experience complex problems that must be experienced by workers with these chronic diseases. Apart from not being able to obtain the right to protect their continuing status as workers, they also have to experience various incidents of discrimination because there is still a lack of awareness on the part of business owners to accept and employ workers with chronic illnesses, like other workers. In fact, nowadays, there are still many people who have the mindset that when they suffer from an illness, a person is considered unable to carry out normal activities. For that reason, the community service activity we want to initiate is developing a module whose target is chronic disease patients who work and for those who are business owners.

The first module that we will develop can be used as a medium of assistance for patients with

chronic illnesses who are able to adapt by paying attention to their mental and physical conditions while undergoing the process of returning to work. We hoped that they would remain productive and able to return to work with all the limitations they face, perhaps they have. The next module is targeted at the business owners. It is hoped that it can help business owners to be more open-minded and treat workers with chronic illnesses like other workers and assist business owners to adapt to adjust facilities and infrastructure and the possibility of job rotation for workers with chronic illnesses, while still focusing on worker productivity so that all parties can still benefit equally. The aim of this research is to determine the factors that can affect return-to-work readiness in patients with chronic diseases and business owners.

METHODS

This study employed a quantitative approach with a cross-sectional design. In this study, an analytical survey was conducted on patients with chronic diseases and business owners to determine the effect of the independent and dependent variables. Independent and dependent variables were simultaneously measured at the same time. This study was conducted from July to September 2022. An overview of the research variable, return-to-work, used a research instrument in the form of a questionnaire conducted using an online system.

Identification of the return-to-work process for workers using an adaptation of the Readiness for Return-To-Work Scale developed by Park *et al*. (2017) and Return-to-work Questionnaire issued by the Health and Safety Executive UK Government will be divided into three scales. Scale A has 13 items for patients who are not working, Scale B has 9 items for working patients, and Scale C has 15 items for non-working and working patients, so the total patient questionnaire was 37 items. While the questionnaire for business owners is an adaptation of the Readiness for Return-to-Work Scale developed by Park *et al*. (2017) and the return-to-work questionnaire issued by the Health and Safety Executive UK Government, the questionnaire consisted of one scale with 15 items. Researchers have tested the validity and reliability of all question items in the questionnaire and have proved valid and reliable. The subjects of this activity are workers and business owners under the auspices of foundations and NGOs that focus on workers with chronic illnesses (Park *et al*., 2017).

The study population included all patients with chronic diseases and business owners in Indonesia. sample was part of the research population that will later be studied or observed, involving inclusion and exclusion criteria as a condition for determining the sample. As for the criteria, inclusion in this study was willingness to be a respondent by signing informed consent. A total of 332 patients with chronic disease and 69 business owners were selected by convenience sampling with the criteria at the time of the study that respondents were willing to be respondents by signing an informed consent form. Data collection was carried out online via Google Forms, as well as modules and educational videos that could be accessed by the respondent.

The independent variables in this study included age, gender, marital status, years of service, job status, and business type with readiness to return to work for chronic disease patients, type of company, and presence of employees with chronic diseases in the company. The dependent variables in this study included readiness to return to work for patients with chronic diseases and readiness to return to work. The influence analysis used SPSS with the Ordinal Logistic Regression Test. Before conducting the test, the researcher first tested the fitting and goodness-of-fit models. This research has passed the Ethics Test at the Ethics Commission Faculty of Public Health, Airlangga University (Ethics Certificate number 147/EA/KEPK/2022).

RESULT

Based on the results of table 1, it can be seen that the majority of respondents with chronic diseases were aged 26-35 years (47.9%), were female (92.8%), were married (63.0%), had worked for ≤5 years (38.9%), and had a job/working status (81.0%). In addition, the readiness to return to work of workers with chronic diseases is in the high category (61.7%).

Based on the results of table 2, it can be seen that the majority of respondents are private business owners (50.7%), and the majority of businesses run are employees with chronic diseases (68.1%). In addition, the readiness of the majority of business owners to return to work is in the high category (98.6%).

The Effect of Age, Gender, Marital Status, Years of Service, and Job Status on Readiness to Return to Work in Patients with Chronic Diseases

Based on the results in table 3, there is a decrease in the -2 Log Likelihood value, which means that the regression model with the independent variable is better than the model with the intercept only.

Based on the results in table 4, a significance value of 0.851> 0.05 is obtained, which means that the ordinal regression model is in accordance with the observation data. Based on the results in table 4, it can be seen that the Pseudo R-Square Nagelkerke value is 0.171, which means that the variables of age, gender, marital status, years of service, and employment status of patients with chronic diseases can affect the readiness to return to work by 17.1%. Meanwhile, based on the results of the partial test with parameter estimates, it is known that the employment statistics variable has a significance value of 0.000 <0.05, which means that there is a partial effect between employment status and readiness to return to work in patients with chronic diseases. Meanwhile, the variables of age, sex, marital status, and years of service had no effect on return-to-work, with a significance value of > 0.05.

The Effect of Type of Business and Existence of Employees with Chronic Diseases on Readiness to Return to Work in Business Owner

Based on the results in table 6, there is a decrease in the -2 Log Likelihood value, which means that the regression model with the independent variable is better than the model with the intercept only.

Table 1. Frequency Distribution of Respondents Data with Chronic Disease

Characteristics	n = 332	%
Age (Year)		
17-25	33	9.9
26-35	159	47.9
36-45	91	27.4
46-55	39	11.8
>55	10	3.0
Gendeer		
Man	24	7.2
Woman	308	92.8
Marital Status		
Single	93	28.0
Married	209	63.0
Widowed	30	9.0
Years of Service (Year)		
≤5	129	38.9
6-10	83	25.0
11-15	50	15.1
16-20	29	8.7
21-25	17	5.1
≥26	24	7.2
Job Status		
Working	269	81.0
Not working	63	19.0
Readiness to Return to Work		
Low	4	1.2
Medium	123	37.0
High	205	61.7

Table 2. Frequency Distribution of Business Owner Respondents Data

Characteristics	n = 69	%
Types of Business		
BUMN	14	20.3
Government Sector	20	29.0
Private	35	50.7
Presence of Employees with Chronic Disease		
There are employees with chronic diseases	47	68.1
There aren`t employees with chronic diseases	22	31.9
Readiness to Return to Work		
Low	1	1.4
Medium	0	0.0
High	68	98.6

Table 3. Model Fitting Information

	-2 Log Likelihoods	Chi-Square	df	Sig.
Intercept Only	232.570			
Finals	186.134	46.436	13	0.000

Table 4. Goodness of Fit

	Chi-Square	df	Sig.
Pearson	134.887	153	0.851
Deviance	127.911	153	0.913

Based on the results in table 7, a significance value of 1.000> 0.05 is obtained, which means that the ordinal regression model is in accordance with the observation data.

Based on the results in table 8, the Nagelkerke Pseudo R-Square value is 0.254, which means that the variable type of company and the presence of employees with chronic illnesses in the company can affect business owners' willingness to return to work by 25.4%. Meanwhile, based on the partial test results with parameter estimates, it is known that the variable type of company and the presence of employees with chronic diseases in the company have no effect on return to work readiness, with a significance value of > 0.05.

DISCUSSION

Effect of Age, Gender, Marital Status, Years of Service, and Job Status on Readiness to Return to Work in Patients with Chronic Diseases

Readiness to return to work in patients with chronic diseases can be influenced by age, sex, marital status, length of service, and work status of the patient. These factors are interrelated and influence readiness to return to work. Returning to work in patients with chronic illnesses must be considered to ensure that they can still be productive and work. The results of a survey conducted by the European Commission Eurostat show that 28% of workers of productive working age suffer from chronic diseases that have a negative impact on their ability to participate in their work due to impaired bodily functions (European Commission Eurostat, 2014). The results of previous studies also show that workers with chronic illnesses can return to work as a goal of rehabilitation (Tammiga *et al*., 2012).

Age is a factor that can affect readiness to return to work. Age can affect the body's ability to process disease recovery in addition to lifestyle. In addition, age also has a close relationship with a person's productive period, so the term productive age is used. Studies to date have shown that approximately 29% of the European Union's male population over the age of 16 and approximately 34% of the female population over the age of 16 suffer from chronic diseases. In the working population, the prevalence of one or more chronic diseases ranges from 10% (ages 16-24) to 55% (ages 55-64) (European Commission Eurostat, 2014). This right shows that workers with chronic diseases are found in every age category, although with different frequencies, and becomes one of the reinforcements that age can affect readiness to return to work for every patient with chronic disease will strive for. In addition, previous studies also stated that return to work is positively related to younger age (Vooijs *et al*., 2015), which means that when workers are still quite young and have a high level of productivity, it encourages them to have a higher readiness to return to work.

Gender is one of the factors that can affect return to work in patients with chronic diseases, because there are several diseases that have a higher or lighter risk for certain sexes. In addition, this also affects the prognosis of chronic diseases. Previous research has shown that, while some people have the same illness and prognosis, others are unable to keep or return to work (Van Muijen *et al*., 2013). A previous review described common factors in this disorder related to disability and found that perceived discomfort, limited physical activity, heavy work, and female sex were associated with work-related illness and disability. These are closely related (Detaille *et al*., 2009). The results of previous studies also indicated that there were some gender differences in the process of returning to work. Men

Table 5. Pseudo R-Square

Cox and Snell	0.131
Nagelkerke	0.171
McFadden	0.097

Table 6. Model Fitting Information

	-2 Log Likelihoods	Chi-Square	df	Sig.
Intercept Only	4.462			
Finals	1.949	2.513	3	0.473

Table 7 Goodness of Fit

	Chi-Square	df	Sig.
Pearson	0.000	2	1.000
Deviance	0.000	2	1.000

Table 8. Pseudo R-Square

Cox and Snell	0.036
Nagelkerke	0.254
McFadden	0.240

tend to return to work later than women (Marino *et al*., 2013).

Marital status can affect readiness to return to work in patients with chronic diseases. This effect is related to the demands of responsibilities that are carried out in relation to marital status. The results of previous studies show that married workers tend to return to work more quickly than single workers. In addition, if we consider gender, married men return to work faster than married women (p=0.019) (Hedayati *et al*., 2013). This is related to the financial responsibilities of married workers.

Years of service and employment status can affect readiness to return to work among patients with chronic diseases. This is related to tenure and employment status, which can be related to the investment value of the work position and the responsibilities of the employee, including workers with chronic illnesses who return to work. The results of previous studies stated that cancer survivors who invested the most heavily in their personal lives and had a long working period tended to delay their return to work (p=0.006), as did those with permanent employment contracts (p=0.042) (Hedayati *et al*., 2013). In addition, other studies state that employment status and marital status before being diagnosed with a chronic disease influence and are relevant to the early return to work process (Foitzek *et al*., 2018). Work experience and sense of security from the worker's employment status influence how workers and companies need to facilitate the return-to-work process.

The Effect of Type of Company and Existence of Employees with Chronic Diseases on Readiness to Return to Work in Patients with Chronic Disease

The results show that the nature of the company and the presence of chronically ill employees influence entrepreneurs' willingness to return. Of course, in this case, consider the existing guidelines and business processes in your field. Previous surveys have shown that respondents representing companies describe their role in the RTW process. About 69% said they were involved in the design of re-entry policies, and 76% said their organization was involved in implementing the policies. About 70% reported contact with employees while away from work and 70% reported contact with employees during rehabilitation for work-related illnesses or work-related injuries. More than a third of the respondents are responsible for helping employees return to work at the local level (35%), 28% at the local level, and 26% at the national level (Grunfeld *et al*., 2008).

The survey also conducted a separate review of workers' return-to-work policies. The results showed that only 3% said that this had not been reviewed. Additionally, one-third (32%) of his company representatives, who implemented return-to-work policies, did not measure the effectiveness of their policies. Measures reported on the effectiveness of return-to-work include length of absence from work (54%), workplace health reports (45%), percentage of employees returning to work (36%), employee feedback (34%), and return-to-work statistics. The performance (25%) (Grunfeld *et al*., 2008). The implementation of return to work cnnot only focuses on whether it has been implemented, but also the effectiveness of its implementation.

Business owners' readiness to return to work is influenced by the type of company and the presence of employees with chronic illnesses, in relation to the ability of the business sector to accommodate return-to-work. Previous studies suggest that a production-oriented perspective on employability becomes clear when economic and cost objectives are emphasized as factors that influence employers' ability to return to work accommodation (Seing *et al*., 2012). The findings are consistent with other studies that highlight concerns about return-to-work policies and the costs associated with hiring people with disabilities. By contrast, previous research has shown a relationship between company size and return-to-work rates. SMEs generally have fewer financial resources for health and safety measures than do large companies (Baril, Berthelette and Massicotte, 2003).

With the current return-to-work policy overhaul, employers play a central role in the process of persuading registered sick workers to return to work. Rehabilitation chains imply the possibility of providing job adjustments and other work assignments, focusing on the employer's duties, and depending on the employability of the worker. However, this does not entail increased legal liability for employers or increased control over the fulfillment of their obligations (Llewellyn *et al*., 2019). Most sick workers in Sweden return to work within 60 days, but those still on sick leave are ill for a long time and are laid off from work. This case represents one public organization and two private organizations (Seing *et al*., 2015). Therefore, it is important to consider how to deal with workers who are on long-term leave due to chronic illness.

CONCLUSION

Based on the results obtained, it was concluded that the variables age, gender, marital status, years of service, and job status of patients with chronic diseases can affect their willingness to return to work of patients with chronic diseases. In addition, it is known that there is a partial relationship between employment status and readiness to return to work in patients with chronic diseases. Meanwhile, the variables of age, gender, marital status, and years of service had no effect on return to work readiness. Variable types of companies and the presence of employees with chronic diseases can affect business owners' willingness to return to work. Meanwhile, based on the partial test results with parameter estimates, it is known that the variable type of company and the presence of employees with chronic diseases in the company have no effect on return to work readiness. Based on the research results, special support from different sectors, including governments, NGOs, and corporate awareness raising for chronically ill people, should be provided to ensure that they are ready to return to work.

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