



RESEARCH ARTICLE

# Medical Check-Up as an Effort to Prevent Disease Complications Early in Office Workers: A Literature Review Study

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## Abstract

Medical Check Up (MCU) is an examination to determine a person's health periodically and his actual health condition at a certain period of time. From MCU activities, we can further examine health conditions and what diseases can be prevented by employees from an early age and then can find out what disease risk factors can occur as seen from the history of existing diseases. In Law No. 23 of 1992 article 23, a statement was obtained that occupational health and safety efforts must be carried out in all workplaces that have at least 10 employees. Most employees who seek treatment or check themselves into the clinic only based on the requests and complaints they experienced at that time, even though the diseases that come are non-communicable diseases (NCDs) for example hypertension, diabetes, hypercholesterolemia, and so on that must be prevented early and monitored properly. Therefore, this research was conducted for the screening process for non-communicable diseases so that they do not become a desirable complication due to the impact of underestimating NCDs suffered or will be suffered by employees and have a function for education so that employees are more aware of their health. This type of research is qualitative research. The methods used in data collection are field observation, questionnaires, in-depth interviews, analysis of the most diseases suffered by employees in the last 1 year. The data that has been collected is then analyzed using system theory, namely inputs, processes, outputs, feedback, and the environment. Based on this research, it will be possible to find out what problems occur in inputs, processes, feedback outputs or the environment that can affect MCU activities. The advice in this study is that checks on new and old employees can be carried out periodically with the support of the leadership to find out the employee's health condition before working in the new workplace and it is recommended that all employees be given the results of the examination as a benchmark for employees to maintain their health.

**Keyword:** Medical Check Up, Factors That Affect MCU Activities, MCU Results, Official, Regulation.

## Introduction

Employee health is a key prerequisite for supporting the productivity and sustainability of an institution. Employees in optimal health tend to have better work capacity, lower absenteeism rates, and a lower risk of accidents and occupational diseases (Elisa et al., 2014). Therefore, efforts to maintain and monitor employee health need to be carried out systematically and continuously, one of which is through the implementation of regular Medical Check Ups (MCU) (Matzler et al., 2008).

Medical Check Up is a comprehensive health examination that aims to determine an individual's health condition at a certain period, detect disease risk factors, and identify non-communicable diseases (NCDs) early before they develop into more serious complications (Prezio et al., 2014). Various studies have shown that regular health checks play an important role in the early prevention of chronic diseases such as hypertension, diabetes mellitus, hypercholesterolemia, and metabolic syndrome, which often do not show symptoms in the early stages (Ogawa & Imai, 2012).

In Indonesia, the implementation of MCU in the workplace has a regulatory basis, as stated in Law Number 23 of 1992 Article 23 which requires occupational health and safety efforts in every workplace with a minimum of ten employees (Lombogia et al., 2015). However, in practice, employee awareness to carry out MCU regularly is still relatively low (Syarifah Nurhayati, 2016). Most employees only check themselves at health facilities when they experience complaints, so that many new diseases are detected at an advanced stage or after complications arise (Trihandini, 2007) (Syarifah & Cahyati, 2016).

The low utilization of medical check-ups (MCU) is influenced by

various factors, including age, level of knowledge, access to health facilities, socioeconomic conditions, and minimal policy and managerial support in the workplace (Kurniawan, 2019). This condition indicates a gap between the strategic benefits of MCU as a preventive measure and the health practices carried out by employees (Xu et al., 2020).

Based on these issues, this study aims to systematically examine the role and benefits of medical check-ups as an early prevention effort for disease complications in office workers through a systematic literature review approach. This study is expected to provide a comprehensive overview of the impact of MCU, factors that influence its implementation, and its implications for strengthening occupational health policies and practices.

## Method

This research method is a literature review (SLR), namely by collecting data from 50 health journals or articles, then selecting 25-30 journals or health articles according to the topic of the importance of MCU for employees. This SLR aims to analyze and systematically compile information published in up-to-date research on the objectives, impacts, and strategies of MCU. The stages of the SLR itself are first, planning the review process, second, conducting the review process, and third, reporting the results.

## Results and Discussion

A review of health journal articles on medical check-ups (MCs) found that some individuals, including the public, and employees, have low awareness of the importance of undergoing MCUs, even though the activity is closely linked to the risk of developing certain diseases. This is due to several factors, including age, information about the benefits of MCUs, MCU facilities or services, social and economic factors (Qi Liu, 2022).

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**Table 2: Routine medical check-up and health-care facility**

Characteristics	n	%
Nearest health facility		
Primary Health Centre/ANM Centre	188	94
Others	12	6
Routine health check-up in the past 12 months		
Yes	28	14
No	172	86
Frequency of health check-up every		
3 months	12	6
6 months	8	4
12 months	14	7
Health information sources (n=200)		
Friends/relatives	12	6
TV/social media (mobile)	60	30
Health workers	88	44
Other	40	20
Distance to nearest health facility	5 (SD=4.7)	

In the table, it was found that only around 14% of the total number of respondents who participated in the study regularly had medical check-ups.

**Tabel 1. Distribusi Responden Berdasarkan Status Medical Check Up**

Variabel	Frekuensi	Persentase (%)
Status Medical Check Up		
Tidak Melakukan <i>medical check up</i>	122	91,0
Melakukan <i>medical check up</i>	12	9,0
Jumlah	134	100

In further research, the percentage was also small, namely 9%. This suggests that many people are aware of the need to perform initial screening, namely MCU. Other studies have also found the impacts of not performing MCU and when doing MCU (Naik & Samal, 2022). In studies examining the impact of not performing MCU, it was found that respondents did not know what disease they were suffering from, they only found out about the disease when they experienced symptoms and then finally sought treatment and sometimes even complications (Aqeel et al., 2014). Meanwhile, studies examining the impact of MCU were that respondents could know the risks of what diseases they would suffer from and then they carried out medical interventions through medication or non-medication so that the disease and its complications in the future could be prevented early (Pentareddy et al., 2017).

## Discussion

Medical check-ups play an important role in maintaining the health of employees, both those aged 20-40 and over 40. According to research by Syarifah (2017) in the Pacitan area in 2014, medical check-up status was associated with the incidence of physical disability. The analysis showed an OR of 5.702, meaning that people who did not undergo medical check-ups had a 5-fold greater risk of experiencing physical disability compared to those who did. Previous research by Trihandini (2012) also found that regular MCU can maintain the elderly's activity (OR=1.85 CI 95%).

In a study using a sample of 130 respondents using the Chi Square test by Bagus (2019) found a relationship between age and the utilization of medical check-up services, where the results of the discussion found that at the age of > 30 years more than the age of < 30 years. This means that there are different perceptions on the utilization or awareness of a person regarding age. In fact, both young and old are required to carry out MCU regularly in order to know the impact of preventing diseases and complications due to diseases that are currently suffered or will be suffered. In the Culica study in Iowa, the United States, it was found that participation in the implementation of medical check-ups was influenced by age and economic status (Eidgahi et al., 2018). The higher the age, the higher the number of health checks carried out, and high economic status also provides a high number in carrying out health checks (Wang et al., 2018).

The timing of medical checkups varies depending on age. However, according to a study by the American Medical Association, regular health checkups should be performed every 12 months. Once every five years for adults (above 18 years) until the age of 40 years, then once every one to three years after the age of 40. If there is no MCU and only seek treatment every time there is a complaint, it will not be possible to see the overall picture of the employee's or individual's health condition. Death is God's will and cannot be prevented, but a disease that accelerates God's destiny can be prevented (Rahayu et al., 2020).

Medical Check up (MCU) must also have several stages and well-managed organizational inputs and there must be components that can be carried out in the health service unit that oversees an agency so that the MCU activity process can be carried out properly (Diyanti et al., 2021), the results of the analysis of feedback research on deficiencies and solutions that must be obtained by hospitals in order to provide quality MCU services to employees (Santoso & Andriyani, 2017).

## Conclusions and Recommendations

Based on the results of a systematic literature review, it can be concluded that medical check-ups play a crucial role as an early disease prevention strategy, particularly for non-communicable diseases, in office workers. MCU has been shown to help individuals identify health conditions and disease risk factors early on, enabling more appropriate and effective medical and non-medical interventions before more serious complications occur.

Despite this, the utilization rate of medical check-ups (MCU) among employees remains relatively low. Literature indicates that low awareness and participation in MCUs are influenced by various factors, including age, limited information about the benefits of MCUs, access to and quality of healthcare services, socioeconomic conditions, and suboptimal regulatory and institutional policy support. This situation aligns with the finding that many individuals only discover their illness after symptoms appear or when the disease has developed complications.

Therefore, more structured efforts are needed to improve the implementation of MCU, both through strengthening the socialization of the MCU's objectives and benefits, and through supporting policies and regulations that encourage regular health checks in the workplace. Sustainable MCU implementation supported by institutional management is expected to increase employee health awareness, reduce the risk of chronic diseases, and contribute to overall improvements in quality of life and work productivity.

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