



THE EFFECT OF COVID-19 TEST CANCELLATION ON HEALTH CARE WORKERS ' REMUNERATION

By

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ABSTRACT

The signs of a drastic decline in Covid-19 cases will have an impact on various related businesses where healthcare workers are involved. With the end of the Covid-19 pandemic, it will automatically result in the abolition of the PCR or Antigen Test which will have an impact on the reducing of their remuneration. The purpose of this study is to analyze the impact of canceling the Covid-19 test on several types of remuneration for health workers. This study used PRISMA analysis supported by the PICOT model. The research was conducted through document search, keyword identification and article review from Google Scholar (n=41), SagePub (n=16), Pubmed (n=6), Semantic Scholar (n=4), and others (n= 31). Other documents were discarded because they were irrelevant, duplication, and other reasons that were not on topic (n=29). The results of the PRISMA analysis showed four problems faced by health workers as a result of the reduction in Covid-19 tests for health workers, namely: a decrease in job vacancies, a reduction in functional benefits and a decrease in personal business for health workers. We recommended to the empowerment of COVID-19 health workers and increasing business potential for health workers as an effort to restore the welfare of health workers.

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1. INTRODUCTION

For more than two years the impact of Covid-19 has been felt in various aspects of life. In the health aspect, many studies state that the impact of the Covid-19 pandemic is not only on the negative side such as the spread of infection, and increased morbidity and mortality of health professionals. It must be admitted that the occurrence of the Covid-19 pandemic also provides a positive side. Many health professionals died, including in Indonesia in 2021 where 507 health workers died, of which 171 were nurses and more than 200 doctors. On the other hand, Covid-19 has helped overcome the unemployment of health professionals by expanding employment opportunities and increasing the medical equipment business. The need for nurses, for example, has sharply increased by more than 20%. Likewise, other health professionals such as doctors, pharmacists, laboratory technicians, nutritionists, and others, are needed a lot from big cities to remote areas. This increase in the number of health workers is followed by an increase in their welfare, both in terms of socioeconomic, education, and career. The emergence of the new Covid-19 pandemic was followed by the expansion of employment opportunities in the health sector. Health equipment ranging from masks, medical coats, disposable shoes, caps, and others increased sharply. This proves that the world of health during the Covid-19 pandemic did not show a negative economic impact on its professionals.

Even though the poverty rate increased from 7% to 9% during Covid. In general, the economic and social pressures that occur are inversely proportional to those that occur in the health profession. This condition has led to the emergence of different opinions in a society where many health professionals are highlighted and referred to as individuals who take advantage of the situation. Therefore, when the signs of Covid-19 began to disappear with a drastic decline in cases in the first trimester of 2022, there was concern about the negative impact on the welfare of health professionals.

The five areas under the health umbrella that were 'assisted' or survived the crisis due to the Covid-19 pandemic from the description above are the increase in job opportunities, the increase in the functional allowance for health workers, the rise in the business of medical equipment which is increasingly in demand, and the increasing demand for medical equipment of nursing items in the market and the advancement of the career path of the healthcare profession. Apart from the negative impact on various sectors of life, Covid-19 provides wisdom for health professionals. Entering the era of the Covid-19 vaccination, which has proven successful in reducing morbidity and mortality, provides positive signs for the business world which is gradually recovering as usual. Whereas initially, Covid-19 service centers had been established, for example in Indonesia in more than 4000 hospitals in 34 provinces. The results of the previous research above explored more about the impact of the spread of Covid-19. Those findings are the gap of our study.

At the end of the first trimester of 2022, there was a sharp decline in cases due to the close relationship between the administration of the vaccine and the Covid-19 morbidity and mortality rate. So that in the end, the PCR or Antigen test requirements will be gradually abolished in various life practices, especially traveling. The success of the vaccination program has an impact on reducing morbidity and mortality. Not even a few Covid-19 wards were closed. This background directly or indirectly causes a decrease in the remuneration of health workers. This research was conducted using the document review method with a descriptive design. The aim is to analyze the impact of the cancellation of the Covid-19 test which includes PC and Antigen on several types of remuneration received by healthcare workers during the pandemic. The implications of this research are expected to be able to provide recommendations for several solutions to restore the welfare of healthcare workers.

2. RESEARCH METHODS

This study used a document review with a descriptive design. PRISMA analysis diagram was used as a systematic review supported by PICOT (Population, Intervention, Comparison, Outcome, Time) analysis as a selector to obtain more valid results. The research was conducted through document searches, keyword identification, and article reviews from Google Scholar, Research Gate, and PubMed. The keywords used were Covid-19, healthcare workers, healthcare workers remuneration, and Covid-19 Test (PCR and Antigen). The documents were obtained from the scientific journal for the last five years (2017-2022) and other valid documents from the world and national health institutions. The author used a descriptive method because the data and information collected focus on actual phenomena and problems in the form of the impact of the abolition of the Covid-19 test on the remuneration of healthcare workers. The results are used to describe an objective empirical state of the phenomenon or problem at hand. Similar method was used by other researcher and was found valid for scientific finding.

3. RESULTS AND DISCUSSION

The results of this review document study are presented in four parts. The first part is the result of obtaining documents from search engines that are entered into the database (Diagram 1). The second part is the result of document selection that is included in the PRISMA analysis (Diagram 2). The third part is the grouping of documents (Table 1) which is a summary of the scientific documents in which the documents focused on the actual problem. The fourth part is the result of document selection using the PICOT model (Table 2). The fifth one is the identification of problems from the documents contained in Table 1 and then offered alternative solutions which are discussed in the Discussion section of this article

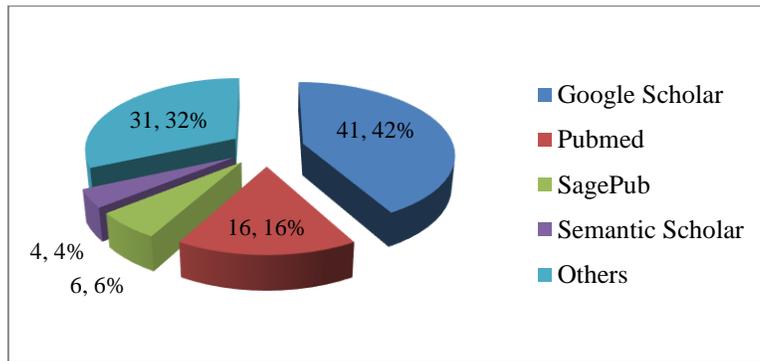


Diagram 1: Documents collected

Diagram 1 above sourced from a search engine entering a database with keywords based on the title. At this early stage, most documents were obtained from Google Scholar (n=41), followed by SagePub (n=16), Pubmed (n=6), Semantic Scholar (n=4), and others (n=31). Other documents were discarded because they were irrelevant, duplication, and for other reasons that were not on the topic (n=29). Document details are contained in PRISMA Analysis in the following diagram:

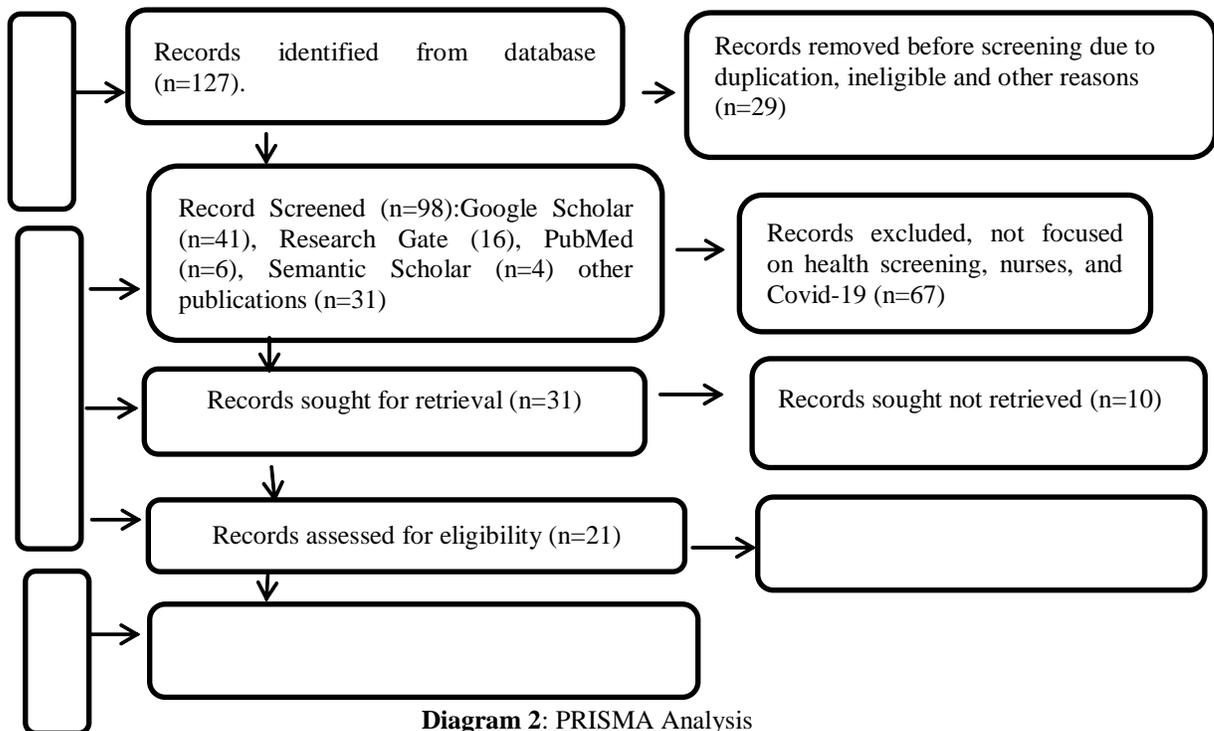


Diagram 2: PRISMA Analysis

The diagram above shows a summary of the Identification stage where (n=127) documents were screened, and recorded in the database, 98 of which were eligible, and (n=29) were deleted due to duplication, ineligibility, and other reasons. In the Screening stage, of (n=98) documents, (n=31) records were taken for retrieval, and (n=67) were excluded because they were out of focus. Meanwhile, in the final stage (Included), (n=10) documents will be reviewed after deleting (n=11) documents that do not meet the requirements.

Table 1: List of Eligible Documents

No.	Title, Authors, Year of publication	Country and research methods	Results
1	How to End the COVID-19 Pandemic by March 2022, Agarwal, R. and Reed, T., 2021)	Global, Quantitative	The analysis suggests multilateral action now can bring an end to the acute phase of the pandemic at early 2022[23].
2	The Impact of the COVID-19 Pandemic on Future Nursing Career Turnover Intention Among Nursing Students, Lin et al., 2021	China, Quantitative	The analysis encourages nursing students to enter the nursing workforce and revealed five central themes: professional role, respect, and recognition; higher wages; reduced workload; enhanced occupational health and safety; and career advancement opportunities[24].
3	Considerations for diagnostic COVID-19 tests, Vandenberg et al., 2021.	Worldwide, Document Review	Continuous global improvement in diagnostic test preparedness is essential for more rapid detection of patients, possibly at the point of care, and for optimized prevention and treatment[25].
4	Nursing Perspectives on the Impacts of COVID-19, Koren et al., 2020	Taiwan Document Review	The COVID-19 pandemic poses a serious threat to public health, global communications, and economic systems worldwide[15].
5	Second Job Holding Among Direct Care Workers and Nurses: Implications for COVID-19 Transmission in Long-Term Care, Baughman et al.,	USA Quantitative	Wages and hours in the primary job are negatively associated with the probability of holding a second job for personal care and nursing aides. Many of these workers move across health settings[26].
6	Interactions Between Socioeconomic Status and Mental Health Outcomes in the Nigerian Context Amid COVID-19 Pandemic: A Comparative Study, Agberotimi et al., 2020	Nigeria Quantitative	The study recommends healthcare workers should be considered for better remuneration and other welfare benefits to sustain their well-being during the present and future pandemic[3].
7	How Will COVID-19 Affect the Health Care Economy?, Cutler, D., 2020	USA Document Review	Health care offices are feeling the pinch. Some primary care practices are reporting reductions in the use of health care services of up to 70%. The salaries of clinical staff are being frozen or reduced, and some staff is being furloughed[27].



8	Attitudes toward COVID-19 vaccination and willingness to pay: comparison of people with and without mental disorders in China, Hao et al., 2021	China Quantitative	The study showed high acceptance and willingness to pay for the COVID-19 vaccine. Factors associated with willingness to pay for the COVID-19 vaccine differed[28].
9	Health Personnel Coping Strategies During Pandemic COVID-19, Suminanto, et al., 2021.	Indonesia Document Review	Strategies to support health professionals during a pandemic include rotating workers regularly, minimizing stigma, and rewarding performance[29].
10	Legal Protection Of Health Personnel During The Covid-19 Pandemic, Gegen et al., 2021	Indonesia Document Review	The Government provided incentives and death benefits, although experienced many obstacles[30].

Table 1 above shows that despite the major challenges (documents no. 1, 2, 4, 7, 10) faced by healthcare workers during the Covid-19 pandemic, their benefits include increasing job opportunities (documents no. 1,2, 3, 6, 7, 8, 9) increased benefits (documents no. 2, 4, 5, 6, 8, 9, 10), legal protections related to income (documents no. 2, 4, 5, 6, 8, 9,10), increased business opportunities and more prospective careers (document no. 2, 4, 5, 6, 7, 8, 9,10).

PICOT Selection

Table No. 2: Eligible Documents

Population	Intervention	Comparison	Outcome	Time
The ten chosen documents involved healthcare professionals, 3 (33%) documents involved the public, and 3 (33%) focused on nurses as the population.	All documents discussed monetary implication (33%), vaccine pay (33%), and the rest were about career, Covid-19 test costs, remuneration, and job, each 8%.	The documents did not discuss healthcare workers and their welfare	All documents discussed the impact of Covid-19 on healthcare workers' welfare (100%).	All documents were prepared during Covid-19 (No. 1-10) from 2020-2022 (100%)

The PICOT selection table above is the summary of the eligible documents screened from the last stage of the PRISMA analysis (Included categories) is evidence that meets our study review requirements. From the two tables above (Tables 1 and 2), there are four problems that we underline as the impact when the Covid-19 test was removed along with Covid-19 which gradually became extinct and was no longer a threat. The four impacts are the threat of unemployment, the decline in the health business due to reduced demand for purchases of healthcare items/equipment, and the abolition of allowances, all of which will result in a decrease in the remuneration of health workers.

Research Limitations

We did not conduct direct research due to limited time, energy, and funds, and the pandemic era that has not yet been completely extinct where we were advised to keep our distance, minimize travel, and direct contact as needed against government advice. However, this research is different from previous research which places more emphasis on proactive steps that healthcare workers can take to recover their economy and welfare after the Covid-19 pandemic.

DISCUSSION

This research has explored the various impacts of Covid-19 on health and professionals. In detail, many studies discuss various backgrounds why Covid-19 is a challenge as well as an opportunity for health workers. Using PRISMA analysis, evidence was found that after more than 2 years of spreading throughout the world in 2022, there were signs of the success of the vaccine program with a drastic reduction in morbidity and mortality due to Covid-19. Although the spread of Covid-19 around the world is recognized as harming the world economy, it must be admitted that Covid-19 on the other hand, ironically, provides 'many advantages' to health professionals. Once the

rules for implementing the Covid-19 test (PCR and Antigen) are cancelled, the health professional's "profits" are automatically threatened. Specifically, there are four health sectors under the auspices of the welfare of health professionals who will have to be ready to take steps how to overcome them.

Job Vacancy

The goal of professionals in looking for work is to obtain job satisfaction. This job satisfaction by many researchers is closely related to the welfare obtained during work, namely wages. The amount of income during work makes employees feel at home. The results of this study prove that during the Covid-19 pandemic, health workers are given functional allowances or Covid-19 benefits which encourage them to continue serving every time, even though they are faced with great risks and even death. The Covid-19 period also offers various job opportunities. In Indonesia, a concrete example is the WismaAtlet, which is used as a national center for treating Covid-19 patients, where thousands of exposed patients are absorbed. Thousands of covid-19 wards were also set up during the pandemic. This is evidence that the pandemic provides a positive perspective on job gains. Not counting other related companies, for example, those related to the manufacture of vaccines, test kits, masks, medical coats, caps, and others. All of them provide their advantages to the health profession. However, when Covid-19 shows signs of disappearing and the implementation of the Covid-19 test (PCR and Antigen) is no longer enforced, all the above job opportunities will certainly be lost. Factories or companies that produce medical items, nursing items, or other medical instruments will be closed. Automatically the existing workforce must look for more opportunities. The problem is if the health workers are purely recruited as Covid-19 volunteers. Efforts are needed to empower them which for the Government is not an easy step because the Government's budget is already large enough to deal with the Covid-19 pandemic.

Covid-19 and Functional Allowances

More than 4000 hospitals that have established wards to serve Covid-19 patients have recruited existing health workers as workers to treat Covid-19 patients[33]. The analysis of this study has shown that many researchers have found the fact that health workers in the Covid-19 ward receive Covid-19 benefits according to their profession, rank, and position. The provision of remuneration to health workers in the Covid-19 ward is proof that health workers who treat Covid-19 patients receive additional rewards. Since the end of 2021, there has been a decline in Covid-19 cases[20]. The decline in cases of patients exposed to Covid-19 had a direct impact on the health workers in the Covid-19 ward because many wards were closed because there were no patients. The lack of Covid-19 cases automatically has an impact on the additional income of health workers. The problem is how to maintain the provision of benefits to health workers after the Covid-19 era. Moreover, many hospitals have experienced a decrease in the number of general patients during Covid-19. One way to overcome this is to increase the potential of their private business, especially those who have independent practice permits which need to be equipped with materials such as entrepreneurship training.

Covid-19-related Medical Item Sales

Various needs for health equipment such as Personal Protective Equipment (PPE) are needed during the Covid-19 pandemics. The need for health workers and the public is so great that lots are produced massively. This research also shows the government's support for the production of medical devices, including Covid-19 test equipment, in which many health workers are involved, both as users and as suppliers. As it is known that not a few health workers are engaged in the medical representative profession[34]. The drastic decline in the number of Covid-19 cases and the successful use of vaccinations, it will have an impact on the products and marketing of these Covid-19-related medical items[35], [36]. In turn, this will have an impact on the income of health workers who are involved in this field. One of their empowerment efforts is for example holding a job fair that is supported by the government through the Ministry of Trade, especially medical products owned by foreign capital with relevant products.

4. CONCLUSION

This research using the document review method aims to analyze the impact of the cancellation of the Covid-19 test which includes PC and Antigen on several types of remuneration received by healthcare workers during the pandemic. The implications of this research are expected to provide recommendations for some solutions to restore the welfare of healthcare workers after the pandemic. The results of the PRISMA analysis show that there are four problems faced by healthcare workers as a result of the abolition of the Covid-19 test for healthcare workers, namely: decreased job vacancy, loss of Covid-19 allowance, reduced functional allowance, and reduced private business for healthcare workers. Our recommendations are the need for Government support in their empowerment, the involvement of the private sector including foreign investors, the movement of independent practice, and the holding of entrepreneurial training for health workers for their economic recovery after Covid-19. The limitations of this study are that we did not conduct direct research due to limited time, energy, and funds, and we are still in the



era of a pandemic that has not yet been completely extinct where we are advised to keep our distance, minimize travel, and make direct contact as needed. against government advice. However, this research can be used as a trigger for further research related to remuneration that is more specific to certain health professions.

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