



Decontamination By Personel of NBC Company of Indonesian Army at Wisma Atlet- Emergency Hospital for Covid-19: Work Load, Stress Work, and Personnel Performance

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Abstract: Purpose of this writing is to discuss the relationship of work load, stress work, and military personnel performance of Kizi Nubika Pusziad (Indonesian Army Engineers-Nuclear-Biological-Chemical Company) including their supporting proofs when conducting his decontamination task at Wisma Atlet RSDC (Wisma Atlet- Emergency Hospital for Covid-19) in Kemayoran – Jakarta as part of military operation other than war in responding to Covid-19 spread launched by TNI (Indonesia National Armed Forces) in the middle of year 2020, at the beginning of Covid-19 Pandemic, and in the period of anxiety and panic among Indonesian people were felt very high if infected by Covid-19 due to no proper medicines or vaccine available yet for fighting the covid-19 disease. Based on analysis of collected data from information-sources interviews and literature studies it shows that among problems of work load and stress work having the most negative impact on personnel performance conducting decontamination task is there a combination of work load, coming in the form of a high number patients treated in Wisma Atlet RSDC, and stress work caused by individual personal problems, mainly such as receiving bad news that his family are positive being infected by Covid-19 and must be treated or quarantined at hospital, or must be isolated at home or have passed away caused by covid-19 disease. Those findings need serious and thorough attentions from the commander and leaders of Kizi Nubika Pusziad, especially if the organization receives order from Indonesian Army Headquarter to perform similar task at a reference emergency hospital as supporting efforts for responding to a non-natural disaster caused by the spread of new emerging disease which is much more contagious and complex than Covid-19 disease in the future.

Keywords: Work Load, Stress Works, and Personnel Performance of Kizi Nubika Pusziad

INTRODUCTION

Military personnel performance is vital for his organization. By having a higher personnel performance his organization performance will be also higher, reach its goals more efficiently and effectively. Maintaining and enhancing Unit Organizations of TNI AD (Indonesian Army) will always encounter numerous challenges. Although there are similar problems being faced by other types of organizations, several unique challenges are faced by a military organization such Kizi Nubika Pusziad (Indonesian Army Engineers-NBC Company) when doing its decontamination task at Wisma Atlet RSDC (Wisma Atlet-Emergency Hospital for Covid-19) in Kemayoran – Jakarta at the beginning of Covid-19 Pandemic in year 2020.

Kizi Nubika Pusziad deployment at Wisma Atlet was part of military operation other than war organized by TNI (Indonesia Nasional Armed Forces), following up the declaration of the Covid-19 outbreak in Indonesia a "non-natural national disaster" made by President of Indonesian Republic, Mr Joko Widodo, in 2 March 2020. Although there several elements of people opposed and requested the Government of Indonesia to cancel its involvement in response efforts to Covid-19 Outbreak, TNI considered Covid-19 Outbreak in Indonesia is a threat to nation's safety and survival and its involvement is as per National Law No 34 Year 2003 article 7. (2).b.9. regarding TNI Task to support Local Government, succeeded to establish 4 (four) KOGASGABPADs (Task Force Combined Unified Commands), they are Natuna Island KOGASGABPAD, Sebaru Island KOGASGABPAD, Wisma Atlet KOGASGABPAD, and Galang Island KOGASGABPAD. By the end of May 2022 those had involved around 34.000 military and police personnels.

Decontamination task performed by Kizi Nubika Pusziad is vital to protect employees of Wisma Atlet RSDC as well as to ensure this facility free from the spread of Covid-19 Virus. Soldiers of Kizi Nubika Pusziad had to work diligently and their commandant and leaders were ought to observe delicately their work performances and influenced factors in the period when anxiety and panic if being infected by Covid-19 Virus was very high due to no appropriate medicine or vaccine available yet.

There several identified factors influenced the performance of personel of Kizi Nubika Pusziad who being deployed in RSDC Wisma Atlet. Two of them will be discussed in this writing. The first is work load and the next is work stress. How those two factors influence unit's personnel performance will be elaborated subsequently. The discussion will be limited on company's decontamination task at Wisma Atlet RSDC in the beginning of Covid-19 in mid of year 2020.

Personnel of Kizi Nubika Pusziad's Decontamination Task

Decontamination is defined as the process of removing contaminants on the surfaces of skin, material, or area, including chemicals, micro-organisms or radioactive substances. Decontamination process to handle contamination's hazard posed by a biological agent such as Covid-19 Virus is called as disinfection. This effort will be achieved by applying a highly effective disinfectant solution.

Decontamination is highly important to kill Covid-19 Virus present in liquids or droplets produced by Covid-19 patients which contaminating personnel protective equipment (PPEs) of Wisma Atlet RSDC employees so that it diminishes the probability of Covid-19 Virus will infect this emergency hospital employees, entering through respiratory system or digestion system or eye membrane or open wound; to avoid cross contamination or contamination spread to a faraway area from the initial or known contaminated place caused by moves of contaminated individuals or materials or vehicles; to return the readiness of contaminated equipment or vehicle so that they are safe to reuse; to provide confidence and psychological guarantee for employee of Wisma Atlet RSDC that He or She has been

already freed from the hazard of Covid-19 Virus presenting in liquids or droplets produced by infected patients. (US Army Techniques Publication No. 3-11.41, Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Consequence Management Operations).

Denny Marhendri (2020) wrote that Kizi Nubika Pusziad has a vital role to ensure Wisma Atlet RSDC Kemayoran – Jakarta free from the spread of Covid-19 virus. This safety guarantee is highly important to support the achievement of Emergency hospital's objectives, subsequently boosting Indonesians' morale and hopes as well as maintaining people's confidences on Government's capability to control the spread of Covid-19 diseases. In the following will be discussed about work load and work stress of decontamination task performed by Kizi Nubika Pusziad at Wisma Atlet RSDC Kemayoran- Jakarta.

Work Load

Jufri & Mellanie (2019) define work load as a number of activities need to be completed by personnel or organization in the specific allocated time, executed by using a set of skills and a number of work forces. Thus, it can be divided into quantity of work load and quality of work load.

Based on definition, literature study, and interview result, data and facts showed decontamination task being given by Wisma Atlet KOGASGABPAD to Kizi Nubika Pusziad are to conduct personnel, material, vehicle, and area decontaminations which were worked by 24 company's personnel.

Personnel Decontamination's quantity of work load covers from operationalization of decontamination station as means to conduct thorough disinfection for everyone (doctors, paramedics, visitors) who is going to leave Emergency Hospital Red Zone each day, from morning to midnight. Meanwhile its quality of work load will be assessed by personnel obedience and thoroughness to each technical step implemented in disinfection process, those are pre washing, supervising-directing-helping to don off personnel protective equipment worn by someone who is going to leave the red zone, controlling the sprays of disinfectant solution and clean water on the person who is doing thorough cleaning, and handing clean clothes.

Quantity work load of material decontamination includes disinfection of personnel protective equipment which being contaminated by droplets or liquids containing Covid-19 Virus but can be used again, such as protective gloves, shoes overs, protective boots, and face shields. This also comprises disinfection of covid-19 patient's utensils used for breakfast, lunch, and dinner such as spoons, forks, mugs, and meal trays. As the quality of work load will be evaluated through personnel compliance and carefulness to implement each technical step during material-disinfection process, those are: cleaning dirt or leftovers, pre-washing, immersing contaminated materials in disinfectant solution for 15 minutes, washing, drying, packaging in vacuum, and keeping in storage warehouse.

Vehicle decontamination is conducted for each Ambulance Vehicle bringing Covid-19 patients to Wisma Atlet RSDC as well as Hearse of Wisma Atlet after returning from delivering Covid-19 patient's remains to the directed cemetery. Quality of work load will be assessed by personnel adherence and delicateness in implementing each of technical steps in vehicle-disinfection process, those are pre-wash, main-wash (rinsed by applying disinfectant solution), reaction time (15 minutes), post-wash, and delivering the vehicle back to its operator.

Area decontamination covers the disinfection activities directed to patient rooms and corridors in the hospital, places for gathering Infected Covid-19 Patients without symptoms, and surrounding areas of Wisma Atlet RSDC buildings inside the Red Zone. Implemented

technical Activities are the sprays of disinfectant solutions on each of areas mentioned above for three times per day, early morning, noon, and evening.

Work load of decontamination task is directly proportional to the increase of Covid-19 patients treated in Wisma Atlet RSDC. It reached its peak in June 2020 when there 7, 797 patients treated in this emergency hospital (Ihsanuddin & Sandro Gatra, 2020), increasing work loads of personnel, materials, vehicle, and area decontaminations had to be done by personnel of Kizi Nubika Pusziad for every day.

Work Stress

Adiguzel dan Kucukoglu (2019) define work stress as condition where there is a tension caused by changes of physical condition, way of thinking, and emotion. Robbins (2001:565-567) in Dosen Pendidikan Website states that there are three main sources as the causes of work stress, those are environmental factors, organizational factors, and individual factors. For environmental factors, they are the rapid changes of economic, political, and technological conditions which need fast adaptation thus making individual exposed to threat of stress work. Related to organizational factors, those include role demands, interpersonal demands, organizational structure dan organizational leadership. Meanwhile for individual factors, work stress comes from personnel's family, individual's economy problems, and individual's characters rooted genetically. Personal's bad family relationship will have impacts on the task to be conducted by him because it will be carried away in his job too.

Based on interview results of personnel and leaders of Kizi Nubika Pusziad, there are several issues which trigger personal's work stress when conducting decontamination task at Wisma Atlet RSDC, grouping into environmental factors, organizational factors, and individual factors as advised by Robbins (2001:565-567).

In aspect of environmental factor, work stress of decontamination task is triggered by the raise of work-load quantity caused by the high increase of covid-19 patients treated in Wisma Atlet RSDC which subsequently adding numbers of RSDC work forces required to handle them, meanwhile there is no personnel addition to support Kizi Nubika Pusziad to execute the decontamination task. Other factor is related to the impermeable PPE received from BNPB (National Disaster Relief Agency) has different standard with the military permeable PPE normally worn by personnel of Kizi Nubika Pusziad, making personnel feels uncomfortable and dehydrate rapidly, thus exposing soldier to heat stroke symptoms faster caused by a sudden increase of body temperature when wearing impermeable PPE to perform his decontamination works. The last factor is quality guarantee of the capability of impermeable PPE received by soldiers to filter aerosol containing Covid-19 Virus because most of those PPE had no testing certification due to scarcity of qualified PPEs and tight competition to get them in international market.

Related to organizational factors, several identified issues have triggered stress work, such as the organization of decontamination task is created in the form of task force organization and in the impromptu state, so that it was deployed with mixed personnel whose different level of decontamination skill as consequence of Company Commander's policy for personnel rotation who had been deployed before to Natuna Island and Sebaru Island doing similar decontamination task in the quarantine operations for Indonesian Citizens coming from Wuhan China and working in World Dream and Diamond Princess Cruise Ships. Next, order issued by Army Headquarter stated that to cancel any soldiers' leaves and permissions travelling out of military garrison during Covid-19 Pandemic, making soldiers feel helpless and sorrowfulness especially when they realized not be able to see sickening family member or to pay last respect to the deceased domiciling out of Jabodetabek and Bandung areas.

For individual factors, several issues have potential to inflict work stress on personnel of Kizi Nubika. Mainly in the forms of anxiety and wariness if his family or beloved ones

(wife, children, parents, brothers/sisters) will also be infected by Covid-19 Virus so that He/she has to be treated in hospital or to be quarantined or to be isolated at home, meanwhile personnel of Kizi Nubika who is being deployed in Wisma Atlet RSDC will not be allowed to leave this facility before concluding his period of time task (2 months) and getting his PCR Test result negative Covid-19. Other factors are personal problems, such as debt and payment issue, including process for getting properties ownership certificates or citizen's related legal documents had to be postponed or canceled because He already had an order to perform decontamination task at RSDC.

The impacts of those triggering factors, in line with Mangkunegara's opinion (2011), on Personnel of Kizi Nubika who suffers work stress can be detected from its symptoms such as disobedience to the safety regulations for donning and doffing PPEs, unstable emotion, loneliness, fatigue, sleeping disorder, excessive smoking, wariness, high blood pressure, or digestion problem.

Influence of Work Load and Work Stress on Decontamination Task Performed By Personnel of Kizi Nubika Pusziad

Personnel performance is crucial for organization. By having high personnel performance, it will help his organization reaching its goals more efficiently and effectively. There is close relations between work load and work stress on personnel performance and they influence one to another too.

Mangkunegara (2103) defines personnel performance as result of work achieved by employee, either counted on its quality or quantity, based on his jobs and responsibilities that must be completed, as impacts of his behaviors or work types in stated time period.

Result of decontamination work performed by Kizi Nubika Pusziad at Wisma Atlet RSDC in Kemayoran-Jakarta, in term of quantity of work load, will be indicated from completion of all daily disinfection tasks as per time schedule given by wisma Atlet KOGASGABPAD towards:

- every individual who is going to leave Red Zone of Wisma Atlet RSDC;
- all contaminated PPEs which can be reused again;
- all utensils which have been used by Covid-19 patients for having breakfast, lunch, and dinner;
- every ambulance which brings covid-19 patient to Wisma Atlet RSDC;
- every hearse which back to Wisma Atlet RSDC after delivering Covid-19 patient's corpse to cemetery;
- all Covid-19 patient rooms
- all hospitals corridors
- all gathering places of covid-19 patients with no symptoms; and
- outer areas of RSDC buildings inside Red Zone.

Related to quality of work load, result of decontamination task performed by Kizi Nubika Pusziad's personnel will be assessed by his compliance and thoroughness to implement each of technical steps required to complete personnel, material, vehicle, and area disinfection process. Good quality of work load will be indicated by Decontamination Beneficiaries' satisfaction in the form of no-complaints or protests conveyed either in writing or in speech to this organization during official programs such as scheduled meetings for staff coordination and evaluation or unofficial program such as RSDC staff gathering and relaxing events.

From data and fact processing, it has found the most influenced factor of work load impacting on performances of Kizi Nubika Pusziad personnel that is the total number of Covid-19 patients treated in Wisma Atlet RSDC. There an increase in term of numbers of Covid-19 patients treated in this emergency hospital will also expand decontamination

workloads have to be completed by 24 personnel of Kizi Nubika Pusziad. During the peak period of Covid-19 patient total number treated in RSDC every personnel of Kizinubika has to wear PPE with average 15 hours per day in order to disinfect all contaminated personnels, materials, vehicles, and areas. This condition has effects on personnel's health condition, most of soldiers having heat-stroke symptoms from the mild one (a high rise of body temperature) up to the severe one (dizziness, migraine) reducing soldier's self-discipline when wearing PPE for purpose of preventing Virus Covid-19 presented in liquid or aerosol sticking on materials' surfaces which will be disinfected to infect soldier's body through his respiratory or digestive system.

For work stress, the triggering factor which have the worst influence on performance of Kizi Nubika Pusziad personnel is individual factor coming in the form of soldier's anxiety or wariness caused by information that there one of or all of his family is/are positively infected by Covid-19 Virus and he/she or they has/have to be treated or quarantined in hospital or to conduct self-isolation at home. This anxiety or wariness can change in to sorrowness when soldier received information that one of his family who had been known positively infected by covid-19 virus then passed away. This soldier will not be able to pay last respect to the deceased because of Pandemic Covid-19 health protocol, stating that the corpse infected by Covid-19 disease will receive retirement process at the hospital and will be brought directly to grave yard to be buried, not allowed to bring the corpse back home.

A combination of workload factor in the form of a high number of covid-19 patients treated at RSDC, and work-stress factor in the forms of by receiving an information that one of or all of his family is/are positively infected by Covid-19 Virus and he/she or they has/have to be treated or quarantined in hospital or to conduct self-isolation at home as well as by hearing news that his beloved one has passed away caused by covid-19 disease are the causative factors which create the worst impacts in lowering performance of personnel of Kizi Nubika Pusziad in executing decontamination task at Wisma Atlet RSDC, so that all Commanders and leaders of this organization have to pay great attention and to anticipate them.

In order to maintain the states of high morale and good health on each soldier who performs decontamination task at Wsma Atlet RSDC, it is very important for commander to understand dan recognize his personnel's capability limitation. If the workload is considered too heavy, he needs to discuss it with Wisma Atlet KOGASGABPAD for getting additional work forces. Commander also has responsibility to ensure his soldiers to do personal hygiene, to have good eating habits, do regular physical activity, and take enough rest. It is desired that commander starts his day with a smile, asks his soldier's condition regularly, encourages his personnel to raise questions, uses time efficiently, creates a good atmosphere of working condition, completes one by one of the priorities, behaves appropriately, and accepts that nobody is perfect.

CONCLUSION

Decontamination task performed by Kizi Nubika Pusziad has a vital role to ensure Wisma Atlet RSDC Kemayoran – Jakarta free from the spread of Covid-19 virus.

Based on data and facts found on the field, and by utilizing theories of work load, work stress, as well as personnel and organization performance to analyze the phenomena, there are closed relationships among work load, work stress, and personnel performance. In the context of decontamination task performed by Kizi Nubika Pusziad at Wisma Atlet RSDC Kemayoran – Jakarta in the early period of Covid-19 Pandemic in mid of year 2020, there a combination of workload factor in the form of a high number of covid-19 patients treated at RSDC, and work-stress factor in the forms of by receiving an information that one of or all of his family is/are positively infected by Covid-19 Virus and he/she or they has/have to be

treated or quarantined in hospital or to conduct self-isolation at home as well as by hearing news that his beloved one has passed away caused by covid-19 disease are the causative factors which creates the worst impacts in lowering performance of personnel of Kizi Nubika Pusziad in executing decontamination task.

Realizing that Covid-19 Pandemic has not over yet and will be the last Pandemic, it is very important for Commanders to pay special attention on problems of work load and work stress in order to maintain and enhance the performance of personnel as well as organization of Kizi Nubika Pusziad when conducting decontamination task at a reference Hospital as part of military operation for responding to unnatural disaster caused by the spread of new emerging disease which is more contagious and complex than Covid-19 disease in the future.

To help enhancing its personnel performance, it is highly recommended that Kizi Nubika Pusziad always keeps a reasonable number stockpiles of Military Standard PPE in order to guarantee that there will be a sufficient number of qualified PPEs whenever there is a Pandemic of new emerging disease.

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