Evaluation of PHEIC (Public Health Emergency of International Concern) Detection Implementation on The Performance of Port Health Employees Class I Medan

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| Article Info                | Abstract                                                                 |
|----------------------------|--------------------------------------------------------------------------|
| Article history:           | Public health emergencies can occur imported i.e. the source of the emergency comes from outside the region and the epicenter is the source of the emergency comes from the work area. Both conditions can arise in unpredictable situations so that the ability of the government and stakeholders in preventing, detect early to detect, handle cases as early as possible to response will affect the extent of the magnitude of emergency event sand post-event handling. Readiness surveillance device in the face of the influx of infectious diseases. Early detection efforts are carried out by detecting events through examination and screening, information and Verification of passengers, transport and disease risk factors. This type of research is Descriptive with the aim to know the evaluation of the implementation of PHEIC to the performance of Class I Medan Port Health Office in 2020, based on respondent answers. The population is all quarantine officers in the working area of Class I MPA Medan as many as 58 respondents, sampling using total sampling. The result of research shows that based on respondent answers obtained PHEIC implementation with employee discipline obtained there is still no timely out hours of work and never reprimanded directly by superiors, while supervision is still less than the leadership is more considered objectively and thoroughly, work activities organized together in teams not individually. It is recommended to all employees to enforce discipline, especially at work hours and the need for effective staffing in improving employee performance as well as working based on a predetermined team work. |
| Received 27 February 2021  |                                                                          |
| Received in revised form 05|                                                                          |
| March 2021                 |                                                                          |
| Accepted 14 March 2021     |                                                                          |

| Keywords:                  |                                                                          |
| Disciplne                 |                                                                          |
| Supervision               |                                                                          |
| Organizational culture    |                                                                          |
| PHEIC detection           |                                                                          |

Introduction

Tackling Emerging Infectious Diseases at the Entrance of the State is an initial effort made to prevent further spread. If it is confirmed that there are people or passengers suspected of developing infectious diseases, it is necessary to take immediate care. This countermeasure is carried out by health authorities at the entrance of the State (Bueno et al., 2016).

Health measures for people, goods and transports are carried out to ensure the fulfillment of health quarantine requirements in order to prevent the influx of quarantine diseases and health disorders that can be caused by people, goods and transport, health measures can be in the form of observation of sufferers and suspects, environmental health to the port of transportation and its contents or border crossers and their luggage providing medical services to sufferers, suspects and destruction of goods that cause health problems (Seleye-Fubara et al., 2011).
Coordination is a synchronous and orderly effort / process to provide the right amount and time and direct the implementation to produce a uniform and harmonious movement and action. Coordination as a process of integrating objectives and activities in a separate task force to achieve organizational objectives efficiently (Thaver et al., 2011). In a coordination management must be centralized, integrated, sustainable and use a multi-agency approach (Vaughn et al., 2019). Coordination and information that is fast and precise by all stakeholders related to using the system used based on the region (hamlet) after tin coordination by the coordinator (Masrochah, 2006).

Epidemiological investigations are conducted to assess the epidemiology of diseases that have the potential to cause extraordinary events that include case verification, case investigation, re-investigation (Amiruddin, 2013).

**Methods**

This type of research is descriptive research is observational because it conducts observations in the field based on the distribution of the frequency of answers given. Population is all employees of Port Health office Class I Medan who have participated in quarantine training. The number of samples using total sampling is as many as 58 people who have participated in health quarantine training.

**Result and Discussion**

**Performance by Discipline**

From the questionnaire conducted to respondents about performance based on discipline can be seen alternative answers given by respondents in the following table:

| No | Statement                                                                 | f  | %   | f  | %   | f  | %   | f  | %   | f  | %   |
|----|----------------------------------------------------------------------------|----|-----|----|-----|----|-----|----|-----|----|-----|
|    | I'm always on time to get into work.                                       | 44 | 75,9| 3  | 5,2 | 3  | 5,2 | 4  | 6,9 | 4  | 6,9 |
|    | I'm always on time out of work.                                            | 38 | 65,5| 7  | 12,1| 2  | 3,4 | 6  | 10,3| 5  | 8,6 |
|    | I'm always in the office during business hours                             | 39 | 67,2| 6  | 10,3| 2  | 3,4 | 10 | 17,2| 1  | 1,7 |
|    | I carry out my duties in accordance with the instructions of the superior| 39 | 67,2| 5  | 8,6 | 2  | 3,4 | 10 | 17,2| 2  | 3,4 |
|    | I was never reprimanded by my boss for a work mistake                      | 39 | 67,5| 5  | 8,6 | 4  | 6,9 | 5  | 8,6 | 5  | 8,6 |
|    | I have always been responsible for the work given                          | 39 | 67,5| 4  | 6,9 | 2  | 3,4 | 9  | 15,5| 4  | 6,9 |
From the table above can be seen that, the majority respondent 44 people (75.9%) stated that always on time when entering work, 38 people (65.5%) stated that strongly agree always on time out of work, 39 people (67.2%) stated that strongly agree I have always been in the office space working hours, 39 people (67.2%) stated that strongly agree when I carry out the task in accordance with the instructions of the superior, 39 people (67.2%) stated that strongly agree if never reprimanded superiors because of work errors, 39 people (67.2%) stated that strongly agree always responsible for the work given, 42 people (72.4%) stated that strongly agree when always make corrections to avoid mistakes of work and 43 people (74.1%) stating that strongly agree if never imposed sanctions / penalties.

**Surveillance Targeted Performance**

From the questionnaire conducted to respondents about performance based on supervision can be seen alternative answers given by respondents in the following table:

| No | Statement                                                                 | Strongly Agree f | % | Agree f | % | Somehow Agree f | % | Disagree f | % | Strongly Disagree f | % |
|----|---------------------------------------------------------------------------|------------------|---|---------|---|-----------------|---|-------------|---|-----------------|---|
| 1  | Supervision conducted by the leadership is always done accurately         | 46               | 79.3 | 1       | 1.7 | 2               | 3.4 | 4           | 6.9 | 5               | 8.6 |
| 2  | Supervision is always on time/scheduled                                   | 46               | 79.3 | 1       | 1.7 | 2               | 3.4 | 5           | 8.6 | 4               | 6.9 |
| 3  | Leadership in conducting objective and thorough supervision               | 47               | 81.0 | 2       | 3.4 | 2               | 3.4 | 1           | 1.7 | 6               | 10.3 |
| 4  | The supervision conducted by the leadership is always centered on strategic/important points | 48               | 82.8 | 1       | 1.7 | 4               | 6.9 | 3           | 5.2 | 2               | 3.4 |
| 5  | Leadership in conducting surveillance is realistic                        | 47               | 81.0 | 1       | 1.7 | 4               | 6.9 | 2           | 3.4 | 4               | 6.9 |
| 6  | The supervision conducted by the leadership must be coordinated with the organization's work flow | 46               | 79.3 | 1       | 1.7 | 1               | 1.7 | 4           | 6.92 | 6               | 10.3 |
| 7  | Leadership supervision is flexible                                         | 47               | 81.0 | 3       | 5.2 | 2               | 3.4 | 4           | 6.9 | 2               | 3.4 |
| 8  | Supervision conducted by the leadership is accepted by all existing employees | 48               | 82.8 | 4       | 6.9 | 2               | 3.4 | 3           | 5.2 | 1               | 1.7 |
From table 2, above can be seen that 46 people (79.3%), respondents strongly agree that the supervision conducted by the leadership is always done accurately, 46 people (79.3%) respondents strongly agreed if supervision is carried out always on time/scheduled, 47 people (81.0%) respondents strongly agreed if the Leadership in conducting supervision is objective and thorough, 48 People (82.8%) respondents strongly agreed that the supervision conducted by the leadership is always centered on strategic/important points, 46 people (79.3%) respondents strongly agreed that if the Leadership in conducting supervision is realistic, 46 people (79.3%) respondents strongly agree that the supervision conducted by the leadership should be coordinated with the organization's work flow, 47 people (81.0%) respondents strongly agreed that the supervision conducted by the leadership is accepted by all existing employees.

**Performance Based on Organizational Culture**

From the questionnaire conducted to respondents about Organizational Culture can be seen alternative answers given by respondents in the following table:

Table 3. Distribution of Respondents' Answer Frequency to Performance Based on Organizational Culture in Class I MPA Medan in 2020.

| No | Statement | Strongly Agree | Agree | Disagree | Disagree | Strongly Disagree |
|----|-----------|----------------|-------|----------|----------|------------------|
| 1  | Employees are encouraged to be innovative and dare to take risks | 51 | 87.9 | 2 | 3.4 | 0 | 0.0 | 3 | 1.7 | 2 | 3.4 |
| 2  | Employees are encouraged to implement new ideas | 51 | 87.9 | 1 | 1.7 | 2 | 3.4 | 1 | 1.7 | 3 | 5.2 |
| 3  | Leaders focus on results rather than on the techniques and processes used to achieve work | 51 | 87.9 | 0 | 0.0 | 2 | 3.4 | 0 | 0.0 | 6 | 10.3 | 1 | 1.7 |
| 4  | Employees are expected to show carefulness, analysis and attention to the task | 51 | 87.9 | 0 | 0.0 | 0 | 0.0 | 5 | 8.6 | 2 | 3.4 |
| 5  | Work activities are organized together in teams not individually | 54 | 93.1 | 0 | 0.0 | 2 | 3.4 | 2 | 3.4 | 3 | 5.2 |
| 6  | Employees are always aggressive and competitive rather than relaxed | 51 | 87.9 | 0 | 0.0 | 0 | 0.0 | 3 | 5.2 | 4 | 6.9 |
| 7  | The activities of the organization are always emphasized on growth to achieve the | 51 | 87.9 | 0 | 0.0 | 1 | 1.7 | 3 | 5.2 | 3 | 5.2 |
In making decisions always use the principles of deliberation and consensus, 52 people (89.7%), respondents strongly agree if employees are encouraged to be innovative and dare to take risks, Employees are given the encouragement to implement new ideas, the Leadership focuses on the results rather than on the techniques and processes used to achieve the results of the work, Employees are expected to show carefulness, analysis and attention to the task, Employees are always aggressive and competitive and instead of relaxing, organizational activities are always emphasized on growth to achieve the goal, 52 people (89.7%), respondents In making decisions always use Principle deliberation and consensus, 54 people (93.1%), respondents strongly agree work activities organized together in teams not individually.

**PHEIC Disease Detection**

From the questionnaire conducted to respondents on PHEIC Disease Detection can be seen alternative answers given by respondents in the following table:

Table 4. Distribution of Respondents' Answer Frequency to Early Detection of PHEIC Disease in Class I MPA Medan in 2020

| No | Statement                                                                 | Strongly Agree | Agree | Somehow Agree | Disagree | Strongly Disagree |
|----|---------------------------------------------------------------------------|----------------|-------|---------------|----------|------------------|
| 1  | Control of risk factors at the entrance of the State is carried out routinely against the sanitary conditions of transport equipment, people and goods in the port | 49 84,5        | 0     | 0,0           | 3        | 5,2              |
| 2  | Early detection efforts are carried out by detecting events through inspection, surveillance, screening of passengers/people, goods and transport | 49 84,5        | 1     | 1,7           | 3        | 5,2              |
| 3  | Surveillance of arrivals is carried out on people, goods and transport    | 49 86,2        | 0     | 0,0           | 3        | 5,2              |
| 4  | Community emergency response efforts are carried out with the implementation of epidemiological investigations and | 49 84,5        | 0     | 0,0           | 1        | 1,7              |
|   | contingency plans for KKMD |   |   |   |   |   |   |   |
|---|----------------------------|---|---|---|---|---|---|---|
| 5 | Supervision of the transport equipment is carried out shortly after the transport arrives in the quarantine inspection area | 49 | 84,5 | 0 | 0,0 | 0 | 0,0 | 2 | 3,4 | 7 | 12,1 |
| 6 | Passengers are the risk factors most susceptible to travel a potential infectious disease outbreak | 49 | 84,5 | 1 | 1,7 | 1 | 1,7 | 1 | 1,7 | 5 | 8,6 |
| 7 | Goods carried by passengers and crew are a risk factor for the emergence of potential infectious diseases outbreaks | 49 | 84,5 | 0 | 0,0 | 5 | 0,0 | 3 | 5,2 | 6 | 10,3 |
| 8 | Environmental monitoring at the entrance of the State both ports and airports is also carried out surveillance of the perimeter area and buffer area | 49 | 84,5 | 0 | 0,0 | 0 | 0,0 | 2 | 3,4 | 7 | 12,1 |
| 9 | For the vigilance of emerging infectious diseases at the entrance state better formed TGC team | 49 | 84,5 | 0 | 0,0 | 1 | 1,7 | 2 | 3,4 | 6 | 10,3 |
| 10 | The discovery of PHEIC cases must be done in advance with the detection of travelers who have signs and symptoms of PHEIC disease criteria | 49 | 84,5 | 0 | 0,0 | 1 | 1,7 | 1 | 1,7 | 7 | 12,1 |

From the table above can be seen that as many as 49 people (84.5%) respondents expressed strongly agreed to control the risk factors at the entrance of the State is carried out routinely to the sanitary conditions of transportation equipment, people and goods in the port. Early detection efforts are carried out by detecting events through inspection, supervision, screening of passengers / people, goods and transport. Supervision of arrivals carried out on people, goods and transport. Efforts to respond to public emergencies carried out by the implementation of epidemiological investigations and contingency plans over KKMD, Supervision of transportation equipment that is carried out shortly after the transport arrives (Seleye-Fubara et al., 2011).
Discipline is the awareness and willingness of a person to obey all organizational rules and social norms that apply. Disciplinary must be enforced in an organization, without good employee discipline, it is difficult for the organization to realize its goals (Dorevitch et al., 2010). So, discipline is the key to achieving its goals. Discipline can also be interpreted as the process of self-control exercises to work effectively, efficiently, and productively (Dreachslin et al., 2017). The purpose of discipline is self-control exercises to improve work performance so that organizational objectives are achieved to create effective employee performance, not only with high motivation and spirit but also must be supported by other factors namely work discipline (Cox et al., 2018).

Respondents' explanations for supervisory variables can be known that all question items, namely supervision conducted by the leadership is always done accurately and always on time / scheduled, the leadership in conducting supervision is objective and thorough, supervision conducted by the company's leadership is always centered on strategic / important points, the leadership in conducting supervision is realistic, supervision conducted by the leadership must be coordinated with the flow of organizational work, supervision conducted by the leadership is flexible and supervision conducted by the leadership is accepted by all employees in the company, the majority of respondents responded agreed and strongly agreed. This shows that the supervision at the Class I Medan Port Health Office has been running well.

Respondents' explanation for organizational cultural variables can be known that all question items are employees are encouraged to be innovative and dare to take risks and implement new ideas, leaders focus on results instead of the techniques and processes used to achieve the results of work, employees are expected to show carefulness, analysis and attention to tasks, work activities are organized together in teams not individually, employees are always aggressive and competitive rather than relaxed. Organizational activities are always emphasized on growth to achieve goals and in making decisions always use the principles of deliberation and consensus, the majority of respondents answered agreed and strongly agreed. This shows that The Port Health Office Class I Medan has a good organizational culture and the culture of the organization has been equally run by both employees and leaders in the office.

Discipline is very important for the growth of the organization, used primarily to motivate employees to be disciplined in carrying out work, both individually and in groups. In addition, discipline is useful to educate employees to comply with and enjoy existing regulations, procedures, and policies, the influence of Work Discipline and Organizational Climate on the Performance of Environmental Service Employees produces good performance (Notoatmodjo, 2011).

Lack of knowledge about existing rules, procedures, and policies is the cause of most disciplinary actions. Seeing the attendance rate of Class I Medan in 2019 KKP employees by 74.13% and there was an increase in 2020 until June 2020 of 77.58%, by looking at this attendance level, it is expected that the discipline of Class I Medan KKP employees in implementing and improving the supervision of early detection of PHEIC disease with maximum. There is a partial influence of work discipline variables on commitments, employee organizations.

Passengers are the most vulnerable risk factors to travel a potential infectious disease outbreak, Goods carried by passengers and crew is a risk factor for the emergence of potential infectious diseases outbreaks, Environmental supervision at the entrance of the State both ports and airports are also carried out surveillance of the perimeter area and buffer area, For the vigilance of emerging infectious diseases at the entrance of the State better formed TGC team, PHEIC case discovery must be done first by detection of travelers who have signs and symptoms of PHEIC disease criteria (Deebaj et al., 2011).
Conclusion

In improving performance based on organizational culture so that the system of meaning and belief is embraced jointly by class I Medan employees to act together, have a form of assumption that has, accepted implicitly to feel, think and react to Environment in the direction of one goal together, it should be necessary to improve coordination with stakeholders in improving organizational culture in implementing PHEIC detection

References

Amiruddin, R. (2013). Surveilans Kesehatan Masyarakat. PT Penerbit IPB Press.

Bueno, M. G., Martinez, N., Abdalla, L., Duarte dos Santos, C. N., & Chame, M. (2016). Animals in the Zika virus life cycle: what to expect from megadiverse Latin American countries. *PLoS neglected tropical diseases, 10*(12).

Cox, J. L., Parkash, R., Abidi, S. S., Thabane, L., Xie, F., Mackillop, J., & IMPACT-AF Investigators. (2018). Optimizing primary care management of atrial fibrillation: The rationale and methods of the Integrated Management Program Advancing Community Treatment of Atrial Fibrillation (IMPACT-AF) study. *American heart journal, 201*, 149-157.

Deebaj, R., Castrén, M., & Öhlén, G. (2011). Asia tsunami disaster 2004: experience at three international airports. *Prehospital and disaster medicine, 26*(1), 71.

Dorevitch, S., Lacey, S. E., Abelmann, A., & Zautcke, J. (2010). Occupational needlestick injuries in a US airport. *Journal of occupational and environmental medicine, 52*(5), 551-554.

Dreachslin, J. L., Weech-Maldonado, R., Gail, J., Epané, J. P., & Wainio, J. A. (2017). Blueprint for sustainable change in diversity management and cultural competence: Lessons from the National Center for Healthcare Leadership diversity demonstration project. *Journal of Healthcare Management, 62*(3), 171-183.

Masrochah, S. (2006). *Sistem Informasi Surveilans Epidemiologi Sebagai Pendukung Kewaspadaan Dini Kejadian Luar Biasa (KLB) Penyakit Di Dinas Kesehatan Kota Semarang* (Doctoral dissertation, Program Pasca Sarjana Universitas Diponegoro).

Notoatmodjo, S. (2011). Kesehatan Masyarakat Ilmu dan Seni. Available From: http://repo.unikadelasalle.ac.id/index.php?p=show_detail&id=6689&

Seleye-Fubara, D., Etebu, E. N., & Amakiri, C. N. T. (2011). Aero-disaster in Port Harcourt, Nigeria: A case study. *Annals of African medicine, 10*(1).

Thaver, A. M., Sobani, Z. A., Qazi, F., Khan, M., Zafar, A., & Beg, M. A. (2011). Assessing the need for training: general practitioners’ knowledge, attitude and practice concerning dengue and malaria in Karachi, Pakistan. *International health, 3*(2), 126-130.

Vaughn, V. M., Saint, S., Krein, S. L., Forman, J. H., Meddings, J., Ameling, J., & Chopra, V. (2019). Characteristics of healthcare organisations struggling to improve quality: results from a systematic review of qualitative studies. *BMJ quality & safety, 28*(1), 74-84.