# Managing Risks of Students Dispatch for Community Service (Kuliah Kerja Nyata) during Covid-19 Pandemic

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**Abstract.** Community service is one of the three dharma of universities in Indonesia. Student dispatch for community service or Kuliah Kerja Nyata is a mandatory academic program for many university students in Indonesia. Nevertheless, the program is in jeopardy due to the Covid-19 pandemic. Therefore, risk management of the program is needed. The method of this research is risk management process assessment with focus group discussion with KKN program manager, students, faculty chaperones, local government and community leaders and health workers; in-depth interview with the head of research and community service institute, the head of student learning program and community service division and corporate medical doctor of the university; and survey of students. The result shows that there are several risk treatments that includes mitigation, sharing and acceptance with corresponding activities to make sure that the objectives of student dispatch for community service program is achieved while properly managing the risks.

Keywords: risk management, student dispatch, community service, university, Covid-19 pandemic

## **1** Introduction

Community service is one of the tridharma of universities in Indonesia. One of common community service programs for university students is Kuliah Kerja Nyata or KKN. It is a form of community service done by students from various study programs. KKN provides students with the chance to show their knowledge, skills and creativity while working with local communities as a trigger for community empowerment. KKN program length is about four to eight weeks in between semesters. KKN is a part of academic program, usually mandatory and students get credits and grade. Before the pandemic, students will be dispatched to live-in in villages in groups and work with the local community to create tailored programs for them. The shift into more engaged and collaborative learning rather than passive lecture will increase quality of education [1], therefore KKN is very important part of learning.

The learning objectives of KKN are: 1) to enhance students' empathy to the problems of the community, 2) to upscale students' skill in identifying, planning actuating, and evaluating community empowerment programs' 3) to improve collaboration of students of different field of study and 4) to upscale student skills of networking with different actors of the community.

These objectives supposed to be achieved to produce qualified graduate. KKN as a form of student dispatch is not a new concept. It has several name iterations but basically a program where students are dispatched to work with the community to solve the problems of the community [2]. It has been done by many universities over the years because it is still perceived as very beneficial for students regardless of some controversies. During KKN program, students are asked to immerse themselves to the daily life of the community they serve, consequently they are placed in and must live-in with the community.

Covid-19 pandemic change the way we live, including the way to do academic process. Nevertheless, the academic process must go on, including KKN. During Covid-19 pandemic, KKN is adjusted into hometown based and offline with stringent protocol or online. The national policy of KKN during Covid-19 pandemic is to collaboration with local community that focused on communication, information and education and adaptation to new normal. Therefore, we need to display the process of risk management associated with the achievement of KKN learning objectives during Covid-19 pandemic. The purpose of this research to manage risks of KKN during Covid-19 pandemic that includes identify the scope, context, and criteria; risk assessment and risk treatment; and communication, consultation, documentation, reporting, monitoring and review.

# 2 Theoretical frameworks

The process of risk management follows the codified standard of ISO 31000: 2018 that can be customized to the nature of the organization. It provides mutual approach to manage any type of risks and can be applied to any activities and help decision-making process at all levels [3]. Risk management supposed to be an integral part of organization decision making on the long term, as organization constantly evaluating and apprising their offering to improving their processes. ISO 31000 for risk management is developed to account for the unexpected in managing risk because it offers a level of assurance and clear guidance in risk management where economic resilience, professional reputation, and environmental and safety outcomes [4].

Risk has the characteristics of uncertainty and shows the possible potential deviation from a reference of value that a future activity may bring. Risk maybe seen an undesirable outcome as the effect of uncertainty on objectives [5][6]. Risk management should be a part of any organization because risk affects the result of the process to guarantee the attainment of the strategic objective [7].

Risk management objective is to create and protect value. This objective is the core of the eight principles that guide risk management framework and process. Risk management is a top-down approach, where leadership and commitment are the core of the framework. Risk management process is guided by the principles and in-line with the framework. The principles, framework and process of risk management is displayed in **figure 1**[8].



Fig. 1. Principles, framework, and process of risk management ISO 31000:2018.

The process of risk management includes the establishment of boundaries by defining the scope, context, and criteria. This definition help organization to set their risk assessment based on their business process and environment. Established boundaries that too narrow may cause significant risk unidentified while the one that too broad may cause organization to lose focus on their significant risks that need to be addressed. After the setting of boundaries, the process is risk assessment that includes identify, analyze, and evaluate. Risk identification is the process of finding, recognizing, and describing risk, where we define the event, causes and consequences. Identified risks are than analyzed to determine their magnitude of likelihood and consequence. After the magnitude of each risk is defined, we than evaluate the risks by comparing them to risk appetite and tolerance of the organization. This is an important step to determine the most appropriate risk treatment. The supporting process of communication, consultation, documentation, reporting, monitoring, and review are done concurrently during the risk management process. [9][10]

## **3 Method**

The research is done during the height of Delta variance of Covid-19 June – August 2021, which concurrent with the schedule of KKN of IPB University. The research is conducted at IPB University. The process of risk management was timely as part of preparation before students were dispatched. Data collected by focus group discussion, in depth interview and survey. Focus

group discussion is conducted once, online with zoom meeting in June 2021. The participants of the focus group discussions are the vice head for community service who are also the KKN program director, the head of student learning program and community service division who is also the KKN program manager, students, faculty chaperones, local government and community leaders and health workers. In-depth interview is conducted online with zoom meeting, one by one, with the head of research and community service division/KKN program manager and corporate medical doctor of the university. Each interview is done in June 2021. Survey is conducted to all students with the rate of respond of 55%. Survey is conducted in the first week of July 2021. All collected data are analyzed descriptively, in line with the ISO 31000 process of risk management guidelines.

The focus of the research is to manage risk of KKN during Covid-19 pandemic, especially at the height of Delta variance spread, so, the scope, context and criteria of the risk management process was based on that. The goal of the risk management activities is students can do their KKN programs safely to achieve the learning objectives of KKN. The application of principles and framework of risk management will not be addressed in this research because they are applied at university level, while the focus of this research is on the KKN program.

# **4** Findings

### 4.1 Scope, context, and criteria

KKN program in IPB University is held by the institute for research and community service. The KKN program director is the vice head for community service and the program manager is the head of student learning program and community service division. KKN is a mandatory academic program for students who has completed 110 of 145 study credits. Students are grouped and each group is placed on a village. Each group of students us responsible for identifying, planning, actuating, and evaluating community service activities based on the needs and wants of the local community. Each group has one student coordinator. There are student coordinators for all students at every district and at every municipality of placement. There are faculty members who acted as chaperones for each municipality of placement. The chaperones are responsible for the health and safety of students and provide consultation to help students conducting their KKN activities. The officers of student learning program and community service division are manning the KKN center and are ready 247 during KKN time to help the students.

The scope, context and criteria of the risk management process was based on the goal of providing safe ways for students to conduct their KKN activities in the height of delta variance spreading of Covid-19 pandemic. The vaccination rate by the end of June is 32 percent of targeted priority recipients (the elderly, health workers and public servant) have had the second dose of vaccines, where 55 percent of them have had the first dose. University students are young people, where categorized as most likely to have mild symptom than other age groups. Therefore, they are not on the top priority of getting the vaccines and most, if not all of them, have had not vaccinated on the time of KKN. The scope, context and criteria of risk management

process is based around the safety of students and the people they interact with during their dispatch program during the Covid-19 pandemic while achieving the objectives of KKN. The other risks of student dispatch program that not directly associated with Covid-19 pandemic are out of the scope for this research.

#### 4.2 Risk assessment

**Risk Identification**. During the KKN program, the unit of served community of each students group is village. Though it is previously decided that students are dispatched on their own hometown, it is still worth to notice that hometown here means municipality. Students may live in different district from their served community; thus, they may need to live in on the village where they will do their community service on. Not all villages have proper running water where students can make sure that they wash themselves properly to prevent the spread of the virus. The availability of other precautions such as masks and sanitizers are also questioned. Therefore, the risk of exposure is high. Living in a village maybe hard for some students, especially for ones comes from big cities. Internet may be spotty as well, so boredom may creep in, and students have large gathering of friends. This also heighten the risk of exposure.

Exposed students may show or do not show Covid-19 symptoms. They still can transmit the virus as the same rate regardless. Students may catch the virus while not showing the symptoms and may transmit the to the people they have close interaction with during dispatch program. Exposed students may show the symptom but cannot get teste due to the lack of test center. Unproper care of sick students may expose other students too, where access to proper medical care may not be available on the area.

Meanwhile, local community expects activities with the students. They may assume the students come to their community to help them to find solution for their problems, which may need face to face interaction or field demonstration. There is always the risk of disappointing local community if the students cannot meet them face to face. Thus, students often opt to meet the locals face to face and considering that the risk of exposure has less impact than the risk of disappointing the local community.

Exposed students may spread the virus to the people in the community. The news of students positive with Covid-19 may spread, even if the virus may not spread. Both will cause reputational damage of the university. Local community distrusts the university for their perceived believe that students cause the spread of Covid-19 in their village. Parents of students distrust the university for their perceived believe that university's dispatch program leads to their children exposed to the disease.

Each potential impact of untreated risk will become the new risk while the risk itself will become the cause of the new risk. This notion is illustrated on **figure 2**.



Fig. 1. Root cause

On the height of delta variance, the local or central government may shut many activities and implementing lock down or high-level social restriction with short notice, especially on areas with high number of case spike. There is always the risk of the program abruptly ended.

**Risk Analysis.** IPB University students are local and international students. Each student is placed based in a village in their hometown municipality. All international students of IPB

University that are joining KKN program of 2021 come from Malaysia, therefore they are placed in a village in their hometown municipality in Malaysia. The KKN program of IPB University is conducted on 132 municipalities of Indonesia and eight municipalities of Malaysia. From those municipalities in Indonesia, 49 of those are high risk, 71 are medium risk, 10 are low risk, one is very low risk and two are no case zone. While in Malaysia, six municipalities are high risk and two are medium risk. Three thousand five hundred and thirteen students, grouped into 409 groups are joining the IPB University KKN Program of 2021. The risk of exposure is different in each placement. From those groups, 141 groups (Indonesia) and 6 groups (Malaysia) are on high-risk zone, 244 groups (Indonesia) and 2 groups (Malaysia) are on medium risk zone, 11 groups are on low-risk zone, 1 on very low risk zone and 2 on no case zone. The data of risk zone are based on official report of Indonesian government and Malaysian government.



Fig. 4. Placement to the municipal capital distance

**Figure 2** shows students' placement. If they are got the virus and get sick, then it is better for them to go home. This figure shows that most students are placed on different municipality of their hometown, so it is considered high risk for transporting sick student home. On the other hand, most students stated that their placement is less than 30 minutes ride as shown in **figure 3**. In case students get sick and need to be transported home, it is not a long ride that may pose higher risk to the transporter, which can be their faculty chaperones or their fellow students. In **figure 4**, we can see that most students stated that their placement to municipal capital is less than 30 minutes ride, so the risk of cannot access proper care if the students get sick is considered as low.

Based on the report of the student coordinators, most of them choose to live-in on the village of placement due to it is easier for them to do their program if they live-in. For some students, it is also more convenience for them to live-in due to either the placement is too far for their homes, or they don't have the means to commute from their home to the village of placement.



Fig. 5 The health protocol compliance of local people

**Figure 5** shows the compliance of local people to health protocol. Students stated that most local people comply with mask mandate and washing hand, although avoiding group dining compliance is still a challenge. The exposure risk is considered on the higher side due to this.



Fig. 6. Students plan (left) versus community's expectation (right)

Students perceived that at some areas of medium and low risk, villagers rarely apply health protocol and expect the students to do face to face interaction. While on high-risk areas, the local government opt to minimize students' interaction with the community with mostly online activities from the start. The probability for students to be exposed to the virus is basically higher

in medium and low risk areas rather that high-risk areas. The consequence of risk of exposure to the disease is based on students' health. Students are checked and tested before placement. Students with comorbid are placed on areas where local government opt to host online only from the get-go.

**Figure 6** shows students plan versus community's expectation of program delivery method. While most students plan for semi online program delivery, community most expect offline program delivery. Although this precaution is for lowering the risk of exposure, nonetheless it carries residual risk of not meeting community expectation.



Fig. 7. Placement distance to Covid-19 test facility

**Figure 7** shows that most students stated that the placement distance to Covid-19 test facility is less than 30 minutes rides. This means that the risk of suspected students cannot get tested is on the lower side.



Fig. 8. Placement distance to Covid-19 treatment facility

Similarly, **figure 8** shows that most students stated that the placement distance to Covid-19 treatment facility is less than 30 minutes ride. This means that the risk of sick students not getting treatment is on the lower side as well.

**Risk Evaluation.** The university is very adamant of achieving the learning outcome and scrapping or postponing the KKN program is off the table. The risk tolerance and appetite of the university is wide, where value creation is very important and the loss of opportunity to create value is undesirable. The university perceived that KKN program will create value of learning with and serving the community for the students, catalyst for empowerment for the community and reputation and recognition for the university. Therefore, all academically eligible students must join the KKN program and asking the commitment of local government partners to keep hosting KKN in any form possible. **Figure 8** shows that most students opt to join KKN this year with some adjustments. Students' choice is in line with university decision to still conducting the KKN program this year.



Postponing Joining with some adjustment Opting for alternate activities

Fig. 9. Students' choice of joining the program this year

## 4.3 Risk treatment

The university leader stated that the university will keep doing the KKN program whatever it takes, consequently risk avoidance is not an option. The preparation treatment includes mandating Covid-19 antigen test for all the students and chaperones, giving all the necessary health protocol and viral news handling guidelines, preparing quarantine place, checking all local health center and local covid squad and being ready 24/7 at dedicated apps for students to communicate with the program center.

The treatment option of mitigation is for risk of student exposure and exposed student. Students' exposure to the virus is mitigated with health and cleaning supply from the university, beside the health protocol guidelines given at preparation. Presumable exposed and exposed students without symptoms are monitored daily by student coordinator and chaperone. Exposed student must do mandatory quarantine for fourteen days at designated place, monitored daily by student coordinator, chaperones, and program center, and get tested again after mandatory quarantine. Exposed students with their groups with the help of ICT.

The treatment option of sharing is for risk of exposed students with mild and severe symptoms. For exposed students with mild symptoms, the center will contact the parents to take their children home or sending the students home with precautions. During Covid-19 pandemic, students will be placed on their hometown municipality, so this treatment is considered possible. For students with severe symptoms, the university will contact local health center and covid squad for their help. Students with either mild or severe symptoms must stop working on their groups and leave the premises. They can continue their work after negative PCR test result.

The treatment for acceptance is for risk of program abruptly ended. Spike in number of cases may cause the local government to implement local lockdown or high-level social restriction. In case of the local government still willing to host online, that the KKN program can continue online. While in the case of the local government refusal to host to concentrate on their effort, then the students can be placed somewhere else or given assignment to make sure that they can still fulfill the learning objectives of the KKN program.

There is always the risk of students exposing local people or perceived as exposing local people to the virus. In this case, the risk treatment is mitigation of impact. All students at that area must be picked up by the chaperone and program center officer. The KKN center must prepare damage control by 1) communicate with the local government and community leaders right away, 2) make sure that all exposed students are out of the area, 3) make sure students safely back to their home, 4) advising students to be wise in using social media and 5) assigning student to alternate activities to fulfill the learning objective of the program.

#### 4.4 Communication, consultation, documentation, reporting, monitoring, and review

The KKN program manager oversees making sure that all communication and consultation channel are open. All students can use the university application to contact their chaperones and program center. There is also a list in the program guidance of all the contact number of student coordinators, chaperones, program manager and officers and university's medical doctor in charge. The program center officers are ready 24/7 to make sure that students and chaperones can report any risk events and the necessary actions are implemented. Risk officer in charge is also available 247 to help program manager as the risk owner monitoring, reviewing, and documenting the risks and risk treatment activities.

## **5** Conclusion

Student dispatch for community service program or KKN is perceived as very beneficial for students. Even in the time of the pandemic, academic activities must go on. To achieve the learning goals, we must assess the risk of KKN program during the Covid-19 pandemic. Based on the risk assessment, the university is opted to do the KKN program with live-in placement. We find that the risk of exposure is still high even in the areas of medium and low risk zone. Therefore, risk treatment of mitigation is implemented in the risk of students exposed to the virus or exposing others to the virus. The risk treatment of sharing is implemented for the risk of Covid-19 positive students. Meanwhile, the risk treatment of acceptance is implemented for the risk of local government ending the program due to spike in cases. The university has prepared all the necessary activities for each risk treatment option.

The result of this research is beneficial for universities that will conduct student dispatch or KKN program in the time of uncertainty due to pandemic or other global issue. Although the Covid-19 pandemic is considered less severe by time, it is still spreading with the same rate as before, or in risk term, still have the same level of probability even if the level of impact is decreasing. Therefore, the result of the study gives a perspective of impact mitigation in managing the risk of student dispatch program during the pandemic.

## References

[1] Vaughan ND. Internet and higher education a blended community of inquiry approach: linking student engagement and course redesign. The Internet and Higher Education. 2010;13(1-2):60-65.

[2] Hardjasoemantri K. Peran pemuda pelajar Indonesia dalam perjuangan bangsa: sebuah jalan dan harapan. Jurnal Sejarah Yayasan Masyarakat Sejarawan Indonesia. 2007;13.

[3] International Organization for Standardization. ISO 31000 risk management - Standard [Internet]. ISO; 2018. Available from: https://www.iso.org/standard/65694.html.

[4] International Organization for Standardization. ISO 31000 risk management [Internet]. ISO; 2018. https://www.iso.org/iso-31000-risk-management.html.

[5] International Organization for Standardization. ISO 31000 risk management - Principles and guidelines [Internet]. ISO; 2009. p. 36. Available from: https://www.iso.org/standard/43170.html#:~:text=It%20is%20intended%20that%20ISO,for%20the% 20purpose%20of%20certification.

[6] Society for Risk Analysis. Society for risk analysis fundamental principles [Internet]. SRA; 2018. Available from: http://www.sra.org/resources.

[7] Rampini GHS, Takia H, Berssaneti FT. Citical success factors of risk management with the advent of ISO 31000 2018 – descriptive and content analyses. Procedia Manufacturing. 2020;39:894-903.

[8] International Organization for Standardization. ISO 31000 risk management – Guidelines [Internet]. ISO; 2018. Available from: https://www.iso.org/obp/ui/#iso:std:iso:31000:ed-2:v1:en.

[9] Susilo LJ, Kaho VJ. Manajemen risiko berbasis ISO 31000: 2018 panduan untuk risk leaders dan risk paractitioners. Indonesia: Grasindo; 2018. p. 143-146.

[10] Aven T. On the new ISO guide on risk management terminology. Reliability Engineering and System Safety. 2010:96(7): 719-726.

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