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Co-Production Practices in Public Services: A Study on the Involvement of Covid 19 Volunteers in Vaccinations in Tanjungpinang

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ABSTRACT

The capacity of the government, be it human resources, infrastructure, and budget, is often not comparable with the problems that must be addressed, especially in handling and controlling the spread of COVID-19. Besides, both the public and the private sector have resources that can be used to reduce the burden on the government. In public services, it is also very possible for co-production to occur, especially in services in the form of health services. The purpose of the study was to determine the practice of co-production in the covid-19 vaccination in Tanjungpinang City. The method used in this study uses a qualitative approach and is presented descriptively, then the informants are determined using purposive sampling. The findings reveal that there is a co-production practice in vaccination between the Tanjungpinang COVID-19 volunteers and the government through related parties. Volunteers are involved in producing health services in this vaccination through socialization, registration of vaccine participants, mobilization, and service flow in the implementation of vaccination.

INTRODUCTION

More than two years since the emergence and spread of covid-19 but still a threat to all countries, including Indonesia. There are many impacts, besides having an impact on public health, other impacts that arise include 1,459 health workers, 545 doctors, 453 nurses, 235 midwives who died in addition to other health workers such as pharmacists, medical laboratory personnel, electromedical personnel, retrieval officers until July 2021 (Annur, 2021), disruption of the learning process in schools, limited mobility of citizens so that it has an impact on the national economy (Rizal, 2020). In addition, household finances are severely impacted by the COVID-19 pandemic, children are left behind in education and health services, and there are additional responsibilities and duties in the role of child care for women, as well as food insecurity and vulnerable groups (SMERU, 2021).

There has been a decline in confirmed cases in Indonesia after experiencing a sharp increase in July 2021. In mid-October 2021, Kepulauan Riau is one of the provinces that currently ranks 16th out of 34 provinces in Indonesia with 53,791 confirmed COVID-19 cases (covid19.go.id, 2021). Kepulauan Riau province consists of 5 regencies and 2 municipalities that are directly adjacent to other countries, so human mobility is so intense, both between provinces and between countries, so it is difficult to avoid the spread of covid 19. Tanjungpinang, the capital of the Kepulauan Riau province with a population of 227,663 people in 2020, ranks second after Batam with 10,120 cases (Corona.kepriprov.go.id, 2021). However, active cases in Tanjungpinang are the highest in the Kepulauan Riau with 103 out of a total of 376 cases in the Kepulauan Riau (Panama, 2021).

The policy on social restrictions has been implemented, coupled with Presidential Decree Number 14 of 2021 on

Vaccine Procurement and Vaccination Implementation in the Context of Combating the Covid-19 Pandemic. These efforts to suppress the spread and death of the confirmed. The evaluation of the effectiveness of the COVID-19 vaccine, carried out by the Health Research and Development Agency of the Indonesian Ministry of Health, proved that the vaccine was able to reduce the risk of being infected with COVID-19 (Kemenkes, 2021), Moreover, vaccination of young people will further reduce the risk of death (Sunohara et al., 2021). Indeed, vaccines are not the only means of controlling the spread and death, but also proper tracking and consistent prevention measures (Andree Surianta, 2021). For example, India carried out the largest vaccination in the world by urging all citizens to immunize in response to the soaring number of COVID-19 cases in mid-2020 and it was effective in controlling the spread of COVID-19 (Kumar et al., 2021).

Amendments to Presidential Regulation Number 99 of 2020 on

Facing the problem of the outbreak of this virus cannot rely on the government alone, but it is a shared responsibility. Therefore, the emergence of volunteers is commonplace starting at the national, regional, and even village levels. The tasks and types of volunteers vary from medical and non-medical volunteers, who contribute to everything from preparing health support infrastructure to conducting socialization on various media channels. Volunteering is the voluntary giving of time and talent to provide a service or perform a task without any direct financial compensation expected. voluntary participation includes citizens' participation in providing services directly to others (Cnaan et al., 1996). There have been several articles discussing COVID-19 volunteers, both in research journals and in community service, including discussing the motivation and willingness of volunteers (Lazarus et al., 2021; Merina Widyastuti, Mufarika, 2021; Simamora & Alwan, 2021), volunteers' role (Andri Trianfano, 2021; Khusairi, 2020), volunteer in health promotion (Setyaningrum & Puriastuti, 2021), Volunteer empowerment and development (Az Zahra F & Nulhaqim, 2020; Herry Prasetyo, Sugeng Riyadi, 2021; Siregar et al., 2021; Tambunan et al., 2021), psychological condition and behavior of volunteers (Firda Apriyanti, Yati Afiyanti, 2022; Istiono & Efendy, 2021; Zain & Jafar, 2021)

None of these articles has discussed how the community is involved in producing public services, especially in the vaccination program. Policymaking is no longer seen as a purely top-down process but as a negotiation among many interacting policy systems. Likewise, services are no longer only delivered by professionals and managerial staff in public institutions but are co-produced by users and their communities (Bovaird, 2007). Conceptually, Co-Production is rooted in the theory of public management and service management (Osborne et al., 2016), coproduction does not challenge the basic premises of theories about public service delivery, because it can only occur at the behest of, and controlled by, service professionals (Brandsen dan Pestoff 2006). To analyze this practice, use a co-production approach, namely the involvement of users or the community in the development of goods and services and the creation of public value (Khine et al., 2021; Osborne et al., 2016; Voorberg et al., 2014).

METHOD

The research method used is a qualitative method with a descriptive type. Qualitative methods produce descriptive data, both in the form of words, which are expressed in writing or verbally from the observed behavior (Norman K. Denzin, 2015) and explore and understand the meaning in several of individuals or groups of people derived from social problems (Creswell, 2018). Data were collected by utilizing of observation and semistructured interviews with research informants. The determination of the informants was carried out using a purposive sampling method, in this case, the process of determining the informants was carried out with the consideration that the informants knew and were involved in the vaccination process in Tanjungpinang, especially those in collaboration with the Tanjungpinang covid 19 volunteers. Primary data were obtained from interviews with informants and secondary data was obtained from website-based electronic media. The informants in this study were the Tanjungpinang Covid 19 volunteer coordinator, volunteer members, the head of the community health center (Puskesmas), and the Kepulauan Riau Provincial Health Office. The data analysis technique used in this research is the data that has been collected and then processed and analyzed qualitatively using the concept of coproduction. The conclusion was drawn based on the results and discussion regarding the characteristics, benefits, and background of co-production conceptually in analyzing the practice of the involvement of COVID-19 volunteers.

RESULTS AND DISCUSSION

The increasing cases of Covid 19 have had a broad impact on the community in almost all regions in Indonesia, especially in the Java Island region as an area of population concentration in Indonesia. This also happened in Tanjungpinang where until mid-2021 the increase in the positive number of covid in Tanjungpinang increased to 300 percent (Puspita, 2021).

Efforts to reduce the rate of covid 19 are to carry out vaccinations in addition to implementing health protocols. For the declaration and vaccination activities in the Riau Archipelago Province itself starting January 13, 2021, where vaccinations were carried out for the Governor of the Kepulauan Riau and regional secretaries, many leaders of the Regional Leadership Communication Forum, and also the Chief of Staff of Defense Area Joint Command (Kogabwilhan) I Tanjungpinang. It should be noted that vaccination in the Kepulauan Riau Province was even the highest vaccination achievement in Indonesia (Maulana, 2021). For Tanjungpinang until September 8, 2021, it has exceeded the requirement for the formation of Herd immunity, which is 70 percent. Where the achievement of vaccination for the target age over 18 years has reached 81.09% and the target for children has reached 81.57%, while the elderly is 79.6% (Kusnadi, 2021). Herd Immunity itself is the group's immunity against disease attacks due to the immunity of most members and consequently reduces the chances of affected individuals coming into contact with susceptible individuals (John & Samuel, 2000).

Vaccination is a form of public service in the form of services in the health sector provided by the government. To produce public services in the form of vaccination, several supporting aspects are needed including the provision of vaccines, health workers, non-health workers, places, and participants for vaccines. The achievement of a high vaccination rate in Tanjungpinang is certainly the result of good cooperation from many parties such as community leaders, religious leaders, volunteers recruited by the government, and also volunteers who are initiatives from the community themselves. In this case, this research focuses on Tanjungpinang Covid 19 volunteers.

Tanjungpinang Covid Volunteers were established in January 2021 which is generally motivated by the increasing number of cases in Tanjungpinang. Volunteer membership is very diverse ranging from students, entrepreneurs, employees, and professionals. At first, the volunteer activities were only distributing basic necessities, masks, and disinfectants, but they had not yet reached vaccination activities and currently, they are still providing assistance in the form of vitamins and oxygen cylinders, such as excerpts from an interview with Edy (volunteer coordinator);

"Previously (vaccination) we distributed necessities such as rice and sugar, masks and disinfectants to the community, we did this because of the impact of covid that was felt by the community... starting January with the vaccine program we were moved to be involved in that activity. In addition to vaccinations, we also provide vitamins and free oxygen cylinders for isoman (self-isolation), although for now, it is not as busy as it used to be when Covid was high"

The background of covid volunteers involved in vaccination is the difficulty of the community in getting information, schedule certainty, and participant quotas in line with the increasing public desire to vaccinate. Volunteers are involved in vaccination in the form of disseminating vaccination schedules and points, and opening registration for participants to prepare vaccine points. Often in the implementation of vaccination, participants do not get the vaccine because the available quota and the number of potential vaccine participants are not balanced, so people often do not get vaccine services. As the results of interviews with volunteer members said;

'We often hear information from friends, relatives, or news in the media that people have queued since the morning but haven't gotten a queue number and even have waited a long time, they finally don't get it, even though they are enthusiastic about getting vaccinated, there was yesterday which was far from Bintan (Bintan Regency) but when I got to the place I couldn't even queue."

The registration mechanism they use is that the public registers through a WA (WhatsApp application) number, then they will receive a queue number, time, and address for the implementation of the vaccination along with the requirements that must be brought by vaccine participants, both vaccines in doses one and two. Vaccine participants register using the queue number as stated in the volunteer WA reply. According to the results of interviews with volunteer members;

"We inform the public about the schedule, place, quota through our social media (Instagram and Facebook) and also through messages on the WA numbers of volunteer members which then spread widely to the community. Then people register through our WA number. So those who come and are served are people who have registered through WA, so there are no people who come and don't get vaccine services but those who have registered, you know, it's a pity, bro, they want to come, but once they come, they don't get it".

Before carrying out the vaccination program, volunteers communicate with the vaccine provider, namely the Health Service through Puskesmas (community health centers), RSUD (regional general hospitals), and beyond with the existence of cooperation vaccines from Polres (the Subregional Police) in Tanjungpinang and Tanjungpinang KKP (Ministry of Maritime Affairs and Fisheries) which have a vaccine quota. Like an interview with the Head of the Pancur Health Center;

"This vaccination collaboration with Covid volunteers is an initiative of the volunteers themselves, they offer to collaborate in the form of gathering vaccine participants and assisting in regulating the flow of vaccination services. I think this is effective because, at the beginning of the implementation, the number of participants is clear".

The head of the Tanjung Unggat Health Center believes;

"Our cooperation is not only with one party but also with community and religious leaders to socialize it...they are actively seeking information on the implementation of vaccines at the puskesmas to be conveyed to their members"

Other opinions were expressed by the Head of other Puskesmas such as the Tanjung Unggat Health Center, Bugis Village, and also the Health Office. Furthermore, they revealed that their contribution was quite large in this regard, as stated by the Head of the Tanjungunggat Health Center;

"Their contribution is very large; the proof is that the vaccination coverage in Tanjungpinang is very high.... At the time of vaccination, there were 4 tables...the registration, observation, screening, and vaccination desks, while the health workers were screening and vaccinating the rest were assisted by volunteers, so it was faster because volunteers also assisted in registration and observation, thereby reducing crowds, thereby reducing the potential for transmission".

The vaccination was carried out with participants coordinated or mobilized by the Tanjungpinang covid volunteers with the cooperation of various parties, which was carried out in the span of 4 March to 11 October 24 times with 9,300 vaccine participants. The following table explains the parties who collaborate with volunteers, the date of implementation, and the number of vaccine participants outside of the vaccination that the government does itself.

Table 1. Implementation of Covid 19 Vaccination			
No	Stakeholder	Activity Date	Partici
			pants
1	Puskesmas of	4, 5 March dan 11 October	850
	Pancur		
2	Puskesmas of	March 6	250
	Tanjung Unggat		
3	Puskesmas of	March 8	300
	Melayu Kota		
	Piring		
4	Provincial	29, 30 March, 15, 16 April, 1 September	2050
	Health Office		
5	RSUD	25, 27 May and 17, 18 June, 11, 12 August	3000
	municipality		
6	KKP, Poltekes,	July 8,9,22,23	1500
	Lantamal IV		
7	Polres	1 and 2 September	1350
	Tanjungpinang		
Total of Vaccine Participants			9300
1			

Source: Tanjungpinang Covid 19 Volunteers 2021.

Vaccination is a service in the form of health services organized by the government to suppress the spread of covid 19. While the public service itself is the fulfillment of the wishes and needs of the community by state administrators, the state was established by the public (the community) of course to improving the welfare of the community (Sinambela, 2014). The concept of governance that governance includes public services not only dominated by the government but also by actors outside the government, namely the public and the private sector. Currently, the needs of the community are increasingly complex but the government's capacity is limited, be it time, facilities, interaction media, and budget (Bentzen et al., 2020). Likewise, services are no longer only delivered by professionals and managerial staff in public institutions but are co-produced by users and their communities (Bovaird, 2007).

Regarding this Tanjungpinang covid volunteer, they as a community involve themselves through collaboration with related parties in vaccination services which are the government's responsibility, but at the beginning of its implementation, there are obstacles related to the government's ability to socialize, convince the public to carry out vaccines and also ensure that the community will receive vaccine services when they come. at vaccination centers. So far there have been obstacles in vaccination, including unclear information, distrust of covid, uneven distribution, limited health facilities, and health workers (Politika, 2021). Through the network (social media) that has volunteer members, it is not only the certainty of the implementation of the vaccine but also the invitation to carry out the vaccine is getting wider, because it is not only social media owned by the government. Among efforts to address vaccine doubts and grow vaccine confidence, an evidence-based communication strategy is essential (Chou & Budenz, 2020; Satoshi Sunohara, 2021).

Co-production is a concept that captures a wide range of activities that can occur at any phase of the public service cycle and where state actors and ordinary people (society) work together to generate benefits. Co-production involves two types of actors, namely state actors who serve voluntarily (Nabatchi et al., 2017). Furthermore, Co-production is related to the services that people get during the implementation process of the production cycle (Khine et al., 2021). Conceptually there are eight objectives of co-production; goals related to democratic values, relationship related, outcomes related objectives, service-related, policy objectives, Identification of solutions and challenges objectives, user related objectives. In this case, the goal of co-production is related to services, and waccination services. In the public sector, co-production and co-creation are seen as strategies to address complex social problems in the context of limited resources, as a means to solve existing problems in new and more effective ways by utilizing civil society resources (Osborne et al., 2016; Voorberg et al., 2014).

The co-production process needs to start from a wellidentified problem so that it leads to a commitment to an open communication process regarding the roles, responsibilities, and boundaries of the process. (Rădulescu et al., 2020). Cooperation between volunteers and related parties is based on an agreement although not formally and in writing about the division of roles in the vaccination process, where volunteers because they do not have medical expertise have a role in socializing, registering participants both before and during vaccine implementation, and regulating the flow of vaccine services. so that the implementation of the vaccine can be regular and reduce crowds. While parties such as health centers, regional hospitals, and health workers from the Tanjungpinang Subregional Police and Lantamal (Main Base of the Indonesian Navy) IV in Tanjungpinang are tasked with screening participants and administering (injecting) vaccines.

The implementation of vaccination is the right effort, considering the community's need for health insurance on the one hand and the fulfillment of vaccination targets by the central government which is currently delegated to local governments. The government, both central and regional, is trying to achieve vaccine targets for the community to control the rate of COVID-19. The benefits of co-production include overcoming social challenges, designing and providing practical and realistic public services, and developing democratic practices (Khine et al., 2021). For local governments, the success of vaccination is an achievement in the eyes of the central government and increases the legitimacy of the power of regional heads because they are able to overcome health problems that if not resolved properly will have an impact on other social problems. Controlling the spread of covid reduces the risk of death for people who have been vaccinated (Miyasaka, 2020) as well as reducing health risks in the form of acute congenital diseases that can impact the capacity of hospital care as has happened in the past.

CONCLUSION

The government's capacity, be it human resources, infrastructure, and budget, is often disproportionate to the problems that must be addressed, considering that the community's needs are very diverse and complex and require a short period of time, such as the COVID-19 pandemic. both the public and the private sector have resources that can be used to reduce the burden on the government. For that reason, coproduction is a rational step to combine these things. through this method (co-production), processes and service products will be more effective and efficient than just trying by the government

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itself. As with the previous results and discussions, the role of COVID-19 volunteers in terms of vaccination has been proven to reduce the government's burden in achieving vaccine targets. Volunteers have a network using social media, be it Facebook, Instagram, or WhatsApp application groups that can reach deeper into society in socialization. get more information and get certainty about getting the vaccine when you come to the centers through the registration that was done previously.

REFERENCES

- Andree Surianta. (2021). Vaksinasi penting bagi Indonesia, tapi bukan pengganti kebijakan pengendalian COVID-19. https://theconversation.com/vaksinasi-penting-bagiindonesia-tapi-bukan-pengganti-kebijakan-pengendaliancovid-19-152752
- Andri Trianfano, S. (2021). Peran Relawan dalam Penanggulangan Virus Covid-19 Melalui Implementasi Konsep "Jaga Tetangga Jaga Keluarga" di Desa Karangnangka Kecamatan Kedungbanteng Purwokerto. Dinamika Administrasi, 18(1). https://doi.org/10.22141/2224-0721.16.4.2020.208486
- Annur, C. M. (2021). Sebanyak 1.459 Tenaga Kesehatan Meninggal akibat Covid-19. https://databoks.katadata.co.id/datapublish/2021/07/21/seba nyak-1459-tenaga-kesehatan-meninggal-akibat-covid-19
- Az Zahra F, K. F., & Nulhaqim, S. A. (2020). Proses Staffing Dan Pengembangan Staf Relawan Covid- 19 Oleh Pemerintah Provinsi Jawa Barat. Jurnal Pekerjaan Sosial, 3(2), 171–183.
- Bentzen, T. Ø., Sørensen, E., & Torfing, J. (2020). Strengthening public service production, administrative problem solving, and political leadership through co-creation of innovative public value outcomes? *Innovation Journal*, 25(1).
- Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review*, 67(5), 846–860. https://doi.org/10.1111/j.1540-6210.2007.00773.x
- Chou, W. Y. S., & Budenz, A. (2020). Considering Emotion in COVID-19 Vaccine Communication: Addressing Vaccine Hesitancy and Fostering Vaccine Confidence. *Health Communication*, 35(14), 1718–1722. https://doi.org/10.1080/10410236.2020.1838096
- Cnaan, R. A., Handy, F., & Wadsworth, M. (1996). Defining who is a volunteer: Conceptual and empirical considerations. *Nonprofit and Voluntary Sector Quarterly*, 25(3), 364–383. https://doi.org/10.1177/0899764096253006
- Corona.kepriprov.go.id. (2021). Data COVID-19 Kepulauan Riau. https://corona.kepriprov.go.id/data.phtml
- covid19.go.id. (2021). Kasus Covid Per-Provinsi. https://covid19.go.id/peta-sebaran
- Creswell, W. J. (2018). Research Design, Qualitative, Quantitative, and Mixed Methods Approaches (Fourth Edi). SAGE Publications.
- Firda Apriyanti, Yati Afiyanti, S. F. (2022). Analisis Hubungan Beban Kerja Dengan Kondisi Psikologis Perawat Relawan Covid-19. *Syntax Idea*, 4(1).
- Herry Prasetyo, Sugeng Riyadi, U. A. S. (2021). PEMBERDAYAAN PEMUDA TANI AKTIF SEBAGAI RELAWAN DESA MELAWAN COVID 19. Dinamika Journal, 3(2), 30–37.
- Istiono, A., & Efendy, M. (2021). Kematangan Emosi dan Prososial pada Relawan Desa Lawan COVID-19 ditinjau dari

Jenis Kelamin. *Psyche* 165 Journal, 14(1), 32–39. https://doi.org/10.35134/jpsy165.v14i1.92

- John, T. J., & Samuel, R. (2000). Herd immunity and herd effect: New insights and definitions. *European Journal of Epidemiology*, 16(7), 601–606. https://doi.org/10.1023/A:1007626510002
- Kemenkes. (2021). Studi Terbaru: Vaksin COVID-19 Efektif Mencegah Perawatan dan Kematian. https://www.kemkes.go.id/article/view/21081200002/studiterbaru-vaksin-covid-19-efektif-mencegah-perawatan-dankematian.html
- Khine, P. K., Mi, J., & Shahid, R. (2021). A comparative analysis of co-production in public services. Sustainability (Switzerland), 13(12). https://doi.org/10.3390/su13126730
- Khusairi, H. (2020). Peran Masyarakat Dan Mahasiswa Dalam Mengatasi COVID-19 Melalui Pembentukan Kelompok Relawan Satuan Gugus. *Al Dzahab Islamic Economy Journal*, 1(1), 18–38.
- Kumar, V. M., Pandi-Perumal, S. R., Trakht, I., & Thyagarajan, S. P. (2021). Strategy for COVID-19 vaccination in India: the country with the second highest population and number of cases. Npj Vaccines, 6(1). https://doi.org/10.1038/s41541-021-00327-2
- Kusnadi. (2021). Tanjungpinang Capai Target Vaksinasi Lebih Awal. https://infopublik.id/kategori/nusantara/562642/tanjungpin ang-capai-target-vaksinasi-lebih-awal
- Lazarus, G., Findyartini, A., Putera, A. M., Gamalliel, N., Nugraha, D., Adli, I., Phowira, J., Azzahra, L., Ariffandi, B., & Widyahening, I. S. (2021). Willingness to volunteer and readiness to practice of undergraduate medical students during the COVID-19 pandemic: a cross-sectional survey in Indonesia. BMC Medical Education, 21(1), 1–12. https://doi.org/10.1186/s12909-021-02576-0
- Maulana, H. (2021). capaian vaksinasi covid 19 Kepri tertinggi di Indonesia.

https://regional.kompas.com/read/2021/08/03/172442278/ca paian-vaksinasi-covid-19-kepri-tertinggi-diindonesia?page=all

- Merina Widyastuti,Mufarika, D. R. A. (2021). MOTIVASI RELAWAN DALAM MEMBANTU KORBAN BENCANA PADA MASA PANDEMIC COVID 19 DI MAMUJU SULAWASI BARAT. Jurnal Keperawatan, 13(1), 213–226.
- Miyasaka, M. (2020). Is BCG vaccination causally related to reduced COVID-19 mortality? *EMBO Molecular Medicine*, 12(6), 10–12. https://doi.org/10.15252/emmm.202012661
- Nabatchi, T., Sancino, A., & Sicilia, M. (2017). Varieties of Participation in Public Services: The Who, When, and What of Coproduction. *Public Administration Review*, 77(5), 766–776. https://doi.org/10.1111/puar.12765
- Norman K. Denzin, Y. S. L. (2015). *The Sage Handbook Of Qualitatif Research* (Y. S. L. Norman K. Denzin (ed.); Fifth Edit). SAGE Publications.
- Osborne, S. P., Radnor, Z., & Strokosch, K. (2016). Co-Production and the Co-Creation of Value in Public Services: A suitable case for treatment? *Public Management Review*, 18(5), 639–653. https://doi.org/10.1080/14719037.2015.1111927
- Panama, N. (2021). Kasus aktif COVID-19 Kota Tanjungpinang tertinggi di Kepri.

https://www.antaranews.com/berita/2429673/kasus-aktifcovid-19-kota-tanjungpinang-tertinggi-di-kepri

Politika, C. (2021). Ini Sederet Kendala yang Hambat Vaksinasi Covid-

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19 di Indonesia. https://databoks.katadata.co.id/datapublish/2021/08/12/inisederet-kendala-yang-hambat-vaksinasi-covid-19-diindonesia

Puspita, R. (2021). Kasus Meninggal Covid-19 di Tanjungpinang Naik 300 Persen.

- https://www.republika.co.id/berita/qugo93428/kasusmeninggal-covid19-di-tanjungpinang-naik-300-persen
- Rădulescu, M. A., Leendertse, W., & Arts, J. (2020). Conditions for co-creation in infrastructure projects: Experiences from the overdiepse polder project (The Netherlands). *Sustainability* (*Switzerland*), 12(18), 1–21. https://doi.org/10.3390/sul2187736
- Rizal, J. G. (2020). Kilas Balik 9 Bulan Pandemi Covid-19 dan Dampaknya bagi Indonesia. https://www.kompas.com/tren/read/2020/12/03/063000665/ kilas-balik-9-bulan-pandemi-covid-19-dan-dampaknyabagi-indonesia?page=all
- Satoshi Sunohara, T. A. (2021). Enhancing public trust in COVID-19 vaccination : The role of governments. OECD Science, Technology and Industry Policy Papers, May, 1–27.
- Setyaningrum, Y. I., & Puriastuti, A. C. (2021). Promosi Kesehatan Upaya Pencegahan COVID 19 Bekerja Sama Dengan Relawan Mahasiswa dan Desa Dilem. Jurnal Pengabdian Pada Masyarakat,Literasi, 1(2), 104–111.
- Simamora, R. S., & Alwan, N. D. (2021). The Correlatin of Motivation To Readiness To Be a Volunteer for Covid-19 in Nursing Students. *Health Media*, 2(2), 17–22. https://urbangreen.co.id/journal/index.php/healthmedia/arti cle/view/62
- Sinambela, L. P. (2014). Reformasi Pelayanan Publik. Teori, Kebijakan dan Implementasi. Bumi Aksara, Jakarta.
- Siregar, L., Sinaga, T. R., & Pruba, A. (2021). Peningkatan Kapasitas Relawan Terkait Pencegahan Covid-19. Jurnal Abdimas Mutiara, 2(1), 1–6. http://jurnal.ahmar.id/index.php/mattawang/article/view/34 2
- SMERU, I. (2021). Ringkasan Eksekutif: Ringkasan Eksekutif, 1–7. https://smeru.or.id/id/content/ringkasan-eksekutif-dampaksosial-ekonomi-covid-19-terhadap-rumah-tangga-danrekomendasi
- Sunohara, S., Asakura, T., Kimura, T., Ozawa, S., Oshima, S., Yamauchi, D., & Tamakoshi, A. (2021). Effective vaccine allocation strategies, balancing economy with infection control against COVID-19 in Japan. *PLoS ONE*, 16(9 September), 1–25. https://doi.org/10.1371/journal.pone.0257107
- Tambunan, I., Pratama, A. S., Jayanti, T. N., Anri, & Arianti, S. A. (2021). Training of Covid-19 Volunteer. JCES (Journal of Character Education Society), 4(1), 238–247.
- Voorberg, W. H., Bekkers, V. J. J. M., & Tummers, L. G. (2014). A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. *Public Management Review*, 17(9), 1333–1357. https://doi.org/10.1080/14719037.2014.930505
- Zain, A. Q., & Jafar, A. (2021). Pengaruh Empathy Care Training Terhadap Perilaku Altruisme Pada Relawan Covid-19 Di Dusun Trajaya Kabupaten Majalengka. Acta Islamica Counsensia: Councelling Research and Applications, 1(2), 83–94.