

## Willingness to Pay for COVID-19 Vaccines in Indonesia: A Thematic Analysis

### [Kesediaan Membayar Untuk Vaksinasi *COVID-19* di Indonesia: Studi Analisis Tematik]

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During the pandemic, the Indonesian government has striven to implement steps to prevent and control the impacts of COVID-19, one of which is through a free program of vaccinations, from the first to the third dose (booster), in order to raise herd immunity. Although these were free, the take-up of the booster vaccination has been slow. This study was aimed at exploring individual preparedness to pay for COVID-19 vaccination, if the government was no longer to pay for these vaccines. The study was conducted using a quantitative approach, employing thematic analysis techniques. The participants comprised 27 people, with their ages ranging from 18-83 years. The results of the study found there were two principle themes (or factors) influencing the preparedness to pay for vaccinations, those of: (1) drive; and (2) deterrent. The drive factor comprised the aspects which supported the public in being prepared to receive, and pay for, vaccinations; these being the obligations to adhere to the regulations of government and institutions, to receive social assistance (welfare), and to ensure personal protection. The deterrent factor comprised the aspects which made the public reluctant to pay for the vaccinations, amongst others being the framing of information about the side-effects of the vaccine, the non-halal (religiously acceptable) composition of the vaccine, and the feeling of satisfaction after having received two doses. Amongst all of these factors, the obligatory nature of vaccination was the aspect most influencing the preparedness to pay. This study provides a picture of why the public may be prepared to pay for the vaccine, the factors which may elevate and depress their preparedness to pay, and thoughts about the costs of the vaccine, which may be the benchmarks in planning policies related to health behavior. The plans of the government to make COVID-19 vaccination subject to payment require assessment of the cost of the vaccine, because this will influence the number of members of the public who are prepared to pay to receive vaccination. This may certainly influence the level of public immunity to COVID-19, in the long term.

*Keywords:* thematic analysis, COVID-19 vaccination, willingness to pay, regulation

Selama pandemi, pemerintah Indonesia berupaya melakukan pencegahan dan penanganan dampak *COVID-19*, salah satunya melalui program vaksinasi gratis dari dosis pertama hingga dosis ketiga (*booster*) untuk meningkatkan *herd immunity*. Meskipun gratis, laju vaksinasi *booster* lambat meningkat. Studi ini bertujuan untuk mengeksplorasi kesediaan individu untuk membayar vaksin *COVID-19* jika pemerintah tidak lagi membiayai vaksinasi *COVID-19*. Studi dilakukan dengan pendekatan kualitatif dengan teknik analisis tematik. Partisipan terdiri dari 27 orang dengan rentang usia antara 18-83 tahun. Hasil studi ini menemukan dua tema utama yang memengaruhi kesediaan membayar vaksin: (1) faktor pendorong (*drive*); dan (2) faktor penghalang (*deterrent*). Faktor pendorong (*drive*) terdiri dari aspek yang mendorong masyarakat untuk bersedia mendapat dan membayar vaksin, yaitu kewajiban untuk mengikuti aturan pemerintah dan institusi, mendapatkan bantuan sosial, dan untuk perlindungan diri. Faktor penghalang (*deterrent*) merupakan aspek yang membuat masyarakat enggan membayar vaksin, antara lain *framing* informasi efek samping vaksin, komposisi vaksin yang tidak halal, dan merasa puas dengan dua dosis. Di antara seluruh faktor tersebut, kewajiban vaksinasi adalah aspek yang paling memengaruhi kesediaan membayar. Studi ini memberikan gambaran mengapa masyarakat bersedia membayar untuk vaksin, faktor yang dapat meningkatkan dan menurunkan kesediaan mereka untuk membayar vaksin, dan perkiraan harga vaksin

*COVID-19* yang dapat menjadi tolok ukur dalam merancang kebijakan terkait perilaku kesehatan. Rencana pemerintah untuk menjadikan vaksinasi *COVID-19* sebagai vaksinasi berbayar membutuhkan asesmen mengenai harga vaksin karena akan memengaruhi seberapa banyak masyarakat yang bersedia untuk mengeluarkan biaya sendiri demi mendapatkan vaksinasi. Hal ini tentu dapat memengaruhi tingkat kekebalan masyarakat melawan *COVID-19* dalam jangka panjang.

*Kata kunci:* analisis tematik, vaksinasi *COVID-19*, kesediaan membayar, regulasi

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During the second half of October, 2022, the trend for positive cases of *COVID-19* underwent an increase, with the daily number of cases reaching 4,707 and with 188 deaths (Cable News Network [CNN] Indonesia, 2022). The number of positive cases of *COVID-19* indicated that the pandemic in Indonesia had not ended. Therefore, on July 29th, 2022, the government of the Republic of Indonesia launched the second booster vaccination program, aimed principally at priority groups, such as health workers, the aged, and those with comorbidities. The researchers, and immunology experts, realized that the vaccine would still be required periodically, because the maximum duration of the protection of the vaccine was only six months (World Health Organization [WHO], 2021b). Scientifically, the benefit of the booster vaccine has been proven to increase immunity and provide greater protection against the severity of the illness (Maragakis & Kelen, 2022). If the situation and conditions warrant it, the *COVID-19* vaccine will be needed periodically, requiring paid-for vaccination (as, for instance, in the case of the influenza vaccine), questions will arise related to whether the Indonesian public will be willing to pay to receive that vaccine.

Kurniawan et al. (2022) had the opinion that during the *COVID-19* pandemic, there was an increase of false news in social media, being dangerous and harmful. Such false news, according to Grinberg et al. (2019), looked accurate but were actually misleading and only covered matters not directly related to the *COVID-19* pandemic. However, such false news were easily trusted by many people, and indirectly affected the public trust on the *COVID-19* vaccines (Kurniawan et al., 2022). Bernard et al. (2021) noted that there was a number of groups actively conducting anti-vaccine campaigns. This caused the possession of a certificate proving

Selama akhir Oktober 2022, tren kasus positif *COVID-19* mengalami peningkatan, dengan jumlah kasus harian mencapai 4.707 kasus dan 188 kasus kematian (Cable News Network [CNN] Indonesia, 2022). Jumlah kasus positif *COVID-19* menunjukkan bahwa pandemi di Indonesia belum berakhir. Maka dari itu, pada tanggal 29 Juli 2022, pemerintah Republik Indonesia meluncurkan program vaksinasi *booster* kedua dengan sasaran diutamakan untuk kelompok prioritas, seperti tenaga kesehatan, lansia, dan masyarakat penderita komorbid. Peneliti dan ahli imunologi meyakini bahwa vaksin akan terus dibutuhkan secara periodik karena durasi perlindungan vaksin hanya bertahan maksimum selama enam bulan (World Health Organization [WHO], 2021b). Secara ilmiah, manfaat vaksin *booster* sudah terbukti meningkatkan kekebalan dan memberikan perlindungan yang lebih besar dari tingkat keparahan penyakit (Maragakis & Kelen, 2022). Apabila situasi dan kondisi mengakibatkan vaksin *COVID-19* menjadi akan dibutuhkan secara berkala dan menjadi vaksin berbayar (misalnya seperti vaksin influenza), timbul pertanyaan sehubungan dengan apakah masyarakat Indonesia bersedia membayar untuk mendapatkan vaksin tersebut.

Kurniawan et al. (2022) berpendapat bahwa selama pandemi *COVID-19*, terjadi peningkatan berita palsu di media sosial yang berbahaya dan bersifat merugikan. Berita palsu ini, menurut Grinberg et al. (2019), terlihat akurat tetapi sebenarnya menyesatkan dan hanya membahas masalah yang tidak berhubungan langsung dengan pandemi *COVID-19*. Walaupun demikian, berita palsu tersebut dipercaya begitu saja oleh banyak orang, dan secara tidak langsung berdampak mengancam kepercayaan masyarakat terhadap vaksin *COVID-19* (Kurniawan et al., 2022). Bermard et al. (2021) mencatat bahwa ada sejumlah kelompok yang aktif melakukan

vaccination is a policy implemented in a number of countries, such as Australia, Israel, Italy, and France (Attwell et al., 2022). The policy of an obligatory vaccination is one rationally applied in an emergency situation, because it has a benefit greater than that of the risk (Cheng, 2022). This policy was also implemented by the Republic of Indonesia, to accelerate the achievement of herd immunity, by the application of regulations obligating the public to receive, at a minimum, a booster dose of the vaccine (additional to primary vaccinations), as a pre-requisite for travel, and entry to public facilities, such as offices, shopping centers, tourist centers, public parks, places of worship and other such facilities. Despite this, the desire to accept the booster vaccine has not been as great as it was with the primary vaccinations (first and second dose), because the public were of the opinion that they already possessed physical immunity and did not require a strengthening vaccination (Febryan & Maharani, 2022). This belief was the result of lack of faith in science (Kurniawan et al., 2022), as faith in science pushes individuals to be able to think analytically, rationally, and constantly in the search of proof when matters are contradictory to intuition (Farias et al., 2013). On the other hand, the authors are of the opinion that this lack of public enthusiasm could be seen from the numbers of new booster vaccinations, which were only around 27.6% by October 25th, 2022, that being lower than the numbers of primary vaccinations achieved in a similar time range (Kementerian Kesehatan Republik Indonesia [The Ministry of Health of the Republic of Indonesia], 2023).

To date, studies concerning willingness to pay for vaccination have more been examined in conjunction with the willingness and desire to receive the COVID-19 vaccine (Goruntla et al., 2021; Hao et al., 2021; Shitu et al., 2021; Wong et al., 2020; Zhang et al., 2021). The risk perception is one of the factors which have been found to be significantly influential regarding willingness to accept the vaccine. Kurniawan et al. (2022) noted that there are many factors that cause misperception, causing rejection on scientific findings. In truth, risk perception is one of subjective characteristics, because each individual has a different risk perception, depending upon the way in which they process information, and reacts to risky events (Colautti et al., 2022). In the context of the COVID-19 pandemic, factors such as the number of cases, the mortality rate, and the length of the pandemic are significantly influential on the level of public risk perception (Chu & Liu, 2020). A low mortality rate can reduce the risk

kampanye anti-vaksin. Hal ini menyebabkan kepemilikan sertifikat bukti vaksinasi merupakan kebijakan yang diimplementasikan di berbagai negara, seperti di Australia, Israel, Italia, dan Prancis (Attwell et al., 2022). Kebijakan wajib vaksinasi ini menjadi rasional untuk diterapkan dalam situasi darurat, karena memiliki manfaat yang lebih besar dibandingkan risikonya (Cheng, 2022). Upaya ini juga dilakukan oleh Republik Indonesia untuk mempercepat tercapainya *herd immunity*, dengan menetapkan regulasi yang mewajibkan masyarakat untuk mendapatkan minimal sampai vaksin *booster* (selain vaksinasi primer) sebagai syarat untuk bepergian dan memasuki fasilitas publik, seperti perkantoran, pusat perbelanjaan, tempat wisata, taman, tempat ibadah, dan fasilitas umum lainnya. Walaupun demikian, animo untuk mendapatkan vaksin *booster* tidak sebaik vaksinasi primer (dosis pertama dan kedua) karena masyarakat beranggapan mereka sudah memiliki kekebalan tubuh dan tidak memerlukan vaksin penguat (Febryan & Maharani, 2022). Keyakinan ini terbentuk atas dasar kurangnya kepercayaan terhadap sains (Kurniawan et al., 2022), ketika kepercayaan terhadap sains membuat individu mampu untuk berpikir analitis, rasional, dan senantiasa mencari pembuktian saat bertentangan dengan intuisi (Farias et al., 2013). Di sisi lain, penulis berpendapat bahwa kurangnya antusiasme masyarakat dapat dilihat dari jumlah capaian vaksin *booster* yang baru sekitar 27,6% per 25 Oktober 2022, yaitu lebih rendah dibanding dengan jumlah capaian vaksinasi primer dalam rentang waktu serupa (Kementerian Kesehatan Republik Indonesia [The Ministry of Health of the Republic of Indonesia], 2023).

Sejauh ini, studi mengenai kesediaan membayar vaksin *COVID-19* lebih banyak diteliti bersamaan dengan kesediaan dan intensi untuk menerima vaksin *COVID-19* (Goruntla et al., 2021; Hao et al., 2021; Shitu et al., 2021; Wong et al., 2020; Zhang et al., 2021). Persepsi risiko menjadi salah satu faktor yang ditemukan memiliki pengaruh signifikan atas kesediaan menerima vaksin. Kurniawan et al. (2022) mencatat bahwa terdapat sejumlah hal yang menyebabkan terjadinya mispersepsi, sehingga menyebabkan timbulnya penolakan terhadap sejumlah temuan ilmiah. Sebenarnya, persepsi risiko bersifat subjektif, karena tiap individu memiliki persepsi risiko yang berbeda, yang tergantung pada cara mereka memproses informasi dan bereaksi terhadap suatu peristiwa berisiko (Colautti et al., 2022). Dalam konteks pandemi *COVID-19*, faktor seperti jumlah kasus, tingkat kematian, dan lamanya pandemi memberikan pengaruh yang signifikan terhadap tingkat persepsi risiko masyarakat (Chu & Liu, 2020). Tingkat

perception and cause people to become unwilling to undergo vaccination (Prakash et al., 2022).

Aside from the risk perception, the framing of the way information is conveyed also influences how people perceive information and react to it (Chi et al., 2021; Gursoy et al., 2022). The framing of information itself derives from the theory of prospects, put forward by Kahneman and Tversky (1979), who held the basic assumption that an individual will make decisions depending upon the way information concerning the risks faced is conveyed. Information which is substantially the same can elicit different responses, depending upon the benefit or risk outlooks which are emphasized.

In its development, this framing is used to identify the different response individuals make, when they are given information with differing framing. This is the case in a variety of contexts, including that of health matters (Cesario et al., 2013). This indicates that each individual will consider all messages received, but that information given in a certain way may possibly be more effective than others in promoting healthy activities (Gallagher & Updegraff, 2012). Because of this, health messages given certain framing will have a persuasive effect, which may be able to influence the perception and the decisions of an individual in taking action (Cesario et al., 2013). Messages given a simple framing can give different viewpoints regarding the information which one wishes to convey. Studies concerning information framing have normally related to the promotion of health issues, such as cancer screening (e.g.: Adonis et al., 2017; Drolet & Lucas, 2022; Lipkus et al., 2019) and vaccination against the human papillomavirus (HPV) (e.g.: Kim et al., 2020; Kim et al., 2022; Vorpahl & Yang, 2018).

The influence of framing has also been examined in studies related to COVID-19 vaccination (for example: Betta et al., 2022; Borah et al., 2021; Peng et al., 2021). The study by Peng et al. (2021), concerning the effects of the framing of information, wherein the risks or losses incurred if vaccination was not implemented were accentuated, had a greater persuasive effect, and a significant impact, on COVID-19 vaccination intensity. Betta et al. (2022) tested the influences of three types of framing, i.e.: (1) personal risk; (2) economic costs; and (3) collective health risks, on the intensity of vaccine take-up, and discovered significant influences from these three types of framing. Betta et al. (2022) recommended

kematian yang rendah dapat menurunkan persepsi risiko dan membuat individu tidak bersedia untuk melakukan vaksinasi (Prakash et al., 2022).

Selain persepsi risiko, pengaruh dari *framing* penyampaian informasi juga memengaruhi bagaimana individu mempersepsikan informasi dan bertindak (Chi et al., 2021; Gursoy et al., 2022). *Framing* informasi itu sendiri berasal dari teori prospek yang dikemukakan oleh Kahneman dan Tversky (1979), yang memiliki asumsi dasar bahwa individu dapat mengambil keputusan dalam kondisi tidak pasti, tergantung dari penyampaian informasi mengenai risiko yang dihadapi. Informasi dengan substansi serupa dapat menghasilkan respon yang berbeda, tergantung dari sudut pandang keuntungan atau risiko yang ditekankan.

Dalam perkembangannya, *framing* digunakan untuk mengidentifikasi perbedaan respon individu apabila diberikan informasi dengan *framing* berbeda dalam berbagai konteks, termasuk informasi mengenai kesehatan (Cesario et al., 2013). Ini menunjukkan bahwa tiap individu akan mempertimbangkan semua pesan yang diterima, tetapi informasi yang diberikan *framing* tertentu mungkin lebih efektif dari yang lainnya dalam mempromosikan perilaku kesehatan (Gallagher & Updegraff, 2012). Oleh karena itu, pesan kesehatan yang diberi *framing* tertentu akan memberikan efek persuasif yang mampu memengaruhi persepsi dan keputusan individu dalam berperilaku (Cesario et al., 2013). Pesan yang diberi *framing* sederhana dapat memberikan sudut pandang yang berbeda terhadap konteks informasi yang ingin disampaikan. Studi mengenai *framing* informasi biasanya mempromosikan isu kesehatan, seperti *screening* kanker (sebagai contoh: Adonis et al., 2017; Drolet & Lucas, 2022; Lipkus et al., 2019) dan vaksinasi *human papillomavirus (HPV)* (sebagai contoh: Kim et al., 2020; Kim et al., 2022; Vorpahl & Yang, 2018).

Pengaruh *framing* juga diteliti dalam studi terkait vaksinasi *COVID-19* (sebagai contoh: Betta et al., 2022; Borah et al., 2021; Peng et al., 2021). Studi oleh Peng et al. (2021) mengenai efek *framing* informasi yang menonjolkan risiko atau kerugian apabila tidak melakukan vaksinasi memiliki efek persuasif lebih tinggi dan berdampak signifikan terhadap intensi vaksinasi *COVID-19*. Betta et al. (2022) menguji pengaruh tiga tipe *framing*, yaitu: (1) risiko personal; (2) biaya ekonomi; dan (3) risiko kesehatan kolektif terhadap intensi mendapatkan vaksin, dan menemukan tidak adanya pengaruh signifikan dari ketiga *framing*. Betta et al (2022) menyarankan untuk menguji efek



the testing of the effects of authority, or the law, which might incline an individual towards obtaining vaccination. Although the use of regulation has controversial characteristics, these regulations have helped ensure the safety of the public and reduced the potential mortality risks resulting from the virus (Rakhmadhani et al., 2021).

From the viewpoint of the theory of deterrence, sanctions or punishment by empowered authorities can prevent more loss-causing behavior, and motivate the public to do the correct thing (Cramton, 1969; Crockett et al., 2014; Delton & Krasnow, 2017). Although these methods involve compulsion, and tend towards coercion, the benefits of compulsory vaccination, from the health viewpoint, result in the protection of the public (Cheng, 2022). In Indonesia itself, the discourse concerning paid-for vaccination was present long before the program of free vaccination was offered by the government. If, in the future, a program of compulsory paid-for vaccination is mandated, study is required to explore just how much individuals are willing to pay for vaccines, and how to formulate these policy regulations, for the achievement of a sufficient level of vaccination to achieve herd immunity.

In the formulation of compulsory vaccination policies, there are six important issues requiring attention; these being: (1) information about the safety and effectiveness of the vaccine; (2) the availability of and accessibility to the vaccine; (3) the influence of the framing of the information concerning both the vaccine and COVID-19; (4) alternative steps besides the vaccine; (5) personal capacity; and (6) the nationalism regulating the vaccination (Romadhon et al., 2022). A study performed by Romadhon et al. (2022) gave an illustration of the pattern of public thought at the beginning of 2021, when the second dose of the vaccine was about to be administered to the public. Public willingness to accept the vaccine was also obviously not always in line with their willingness to pay for the vaccine. Information about the benefits of the vaccine and its side-effects had a significant influence on willingness to pay for it, because individuals were more willing to pay for the vaccine provided it had no side-effects (Graeber et al., 2021).

Harapan et al. (2020) stated that around 70% of the Indonesian people were willing to pay for the vaccine at an estimated cost of USD 57.00, or IDR 800,000.00. This was influenced by the factor of monthly incomes, profession in the field of health services, and the size of

otoritas atau hukum yang dapat mendorong individu untuk melakukan vaksinasi. Meskipun penggunaan regulasi bersifat kontroversial, aturan ini membantu memastikan keselamatan masyarakat dan mengurangi potensi risiko mortalitas akibat virus (Rakhmadhani et al., 2021).

Dari sudut pandang teori *deterrence*, sanksi atau hukuman dari otoritas berwenang dapat mencegah perilaku yang lebih merugikan dan memotivasi masyarakat melakukan apa yang benar (Cramton, 1969; Crockett et al., 2014; Delton & Krasnow, 2017). Meskipun cara ini bersifat memaksa dan cenderung koersif, manfaat wajib vaksinasi dari sisi kesehatan membantu melindungi kesehatan publik (Cheng, 2022). Di Indonesia sendiri, wacana program vaksinasi berbayar sudah ada jauh sebelum program vaksinasi gratis diberikan oleh pemerintah. Apabila di masa depan program wajib vaksinasi berbayar diberlakukan, diperlukan studi untuk mengeksplorasi sejauh mana individu bersedia untuk membayar vaksin dan bagaimana memformulasikan kebijakan regulasi tersebut sehingga cakupan vaksinasi cukup untuk mencapai *herd immunity*.

Dalam perumusan kebijakan wajib vaksinasi, terdapat enam isu penting yang harus diperhatikan, yaitu: (1) informasi mengenai keamanan dan efektivitas vaksin; (2) ketersediaan dan keterjangkauan vaksin; (3) pengaruh *framing* informasi mengenai vaksin maupun COVID-19; (4) alternatif tindakan selain vaksinasi; (5) kemampuan pribadi; dan (6) nasionalisme yang mengatur vaksinasi (Romadhon et al., 2022). Studi yang dilakukan Romadhon et al. (2022) memberikan gambaran bagaimana pola pikir masyarakat di awal tahun 2021 ketika vaksin dosis kedua baru akan dilaksanakan kepada masyarakat. Kesiediaan untuk mendapatkan vaksin juga ternyata tidak selalu linear dengan kesiediaan membayar vaksin. Informasi mengenai manfaat vaksin dan efek sampingnya memberikan pengaruh signifikan terhadap kesiediaan membayar vaksin COVID-19 karena individu akan lebih bersedia secara sukarela untuk membayar vaksin selama tidak ada efek samping vaksin (Graeber et al., 2021).

Harapan et al. (2020) mengungkapkan bahwa sekitar 70% masyarakat Indonesia bersedia membayar vaksin dengan estimasi harga USD 57 atau IDR 800.000. Hal tersebut dipengaruhi oleh faktor pendapatan bulanan, profesi di bidang layanan kesehatan, dan tingginya

the perception of the risks from the effects of COVID-19. The study by Harapan et al. (2020) was performed when the program of free vaccinations had not yet been provided by the government, and prior to the booster vaccination program being launched. Studies about how ready the public are to pay for the vaccine, and the reasons behind this, are crucially important to be examined, if a program of obligatory vaccination, for which one must pay, is implemented, and there is the need for periodic COVID-19 re-vaccination. Further to this, a discussion of COVID-19 vaccination, requiring payment, was begun on January 24th, 2023, by the Ministry for Health of the Republic of Indonesia, because, in the future, COVID-19 vaccination will become routine, like vaccination for influenza and meningitis (Sadikin, 2023, as cited in Sagita, 2023). Discussions about periodic COVID-19 vaccinations are occurring not only in Indonesia. The United States of America's Food and Drug Administration (FDA) has also announced that COVID-19 vaccination will be carried out on a yearly basis, as a strategy to strengthen bodily immunity (McGinley, 2023).

The polemic of paid-for COVID-19 vaccination emerged at the beginning of 2021, but was criticized and rejected because it was considered to benefit the commercialization of vaccination arising from the pandemic situation (Cable News Network [CNN] Indonesia, 2021). According to the World Health Organization (WHO), COVID-19 vaccinations needed to be given at no cost to the public, at the time of the pandemic, to prevent the transmission of COVID-19, and to reduce the death toll resulting from the spread of the virus. Vaccination on a paid-for basis was feared would give rise to ethical problems, and inequality of public access to the vaccine (IDN Financials, 2021). Although this was so, a number of countries implemented a paid-for vaccination strategy, for example Singapore, which provided COVID-19 vaccine through private clinics, with an administration cost of between SGD 10 (USD 7.58; IDR 107,000) to SGD 25 (USD 18.98; IDR 267,000) and India, which supplied paid-for vaccination services in private hospitals, at a cost of up to INR 1,410 (USD 17.19; IDR 274,000; Rahma, 2021).

Paid-for vaccination may be implemented once a disastrous situation is considered to be under control. This is the same as in the case of a measles epidemic, which had previously been overcome with free vaccinations, so that gradually the vaccine could become paid-for (University of Nevada, n.d.). The costs of

persepsi risiko akan dampak COVID-19. Studi Harapan et al. (2020) dilakukan ketika program vaksinasi belum diberikan secara gratis oleh pemerintah, dan sebelum program vaksin *booster* diluncurkan. Studi mengenai sejauh mana masyarakat bersedia membayar vaksin dan alasan yang melatarbelakanginya menjadi krusial untuk diteliti, jika program wajib vaksinasi dijalankan dan kebutuhan vaksin COVID-19 diperlukan secara periodik. Lebih lanjut, wacana mengenai vaksinasi COVID-19 berbayar sudah diungkapkan oleh Menteri Kesehatan Republik Indonesia pada tanggal 24 Januari 2023, karena ke depannya vaksinasi COVID-19 akan menjadi vaksin rutin seperti vaksin influenza dan meningitis (Sadikin, 2023, sitat dalam Sagita, 2023). Wacana mengenai vaksinasi COVID-19 periodik tidak hanya terjadi di Indonesia. *Food and Drug Administration (FDA)* di Amerika Serikat juga menyatakan bahwa vaksinasi COVID-19 akan dilaksanakan tahunan sebagai strategi untuk memperkuat kekebalan tubuh (McGinley, 2023).

Polemik vaksinasi COVID-19 berbayar telah muncul sejak awal tahun 2021, tetapi menuai kritik dan penolakan karena dianggap memanfaatkan situasi pandemi untuk komersialisasi vaksin (Cable News Network [CNN] Indonesia, 2021). Menurut *World Health Organization (WHO)*, vaksinasi COVID-19 harus diberikan secara gratis kepada masyarakat saat pandemi, mengingat tujuan vaksinasi COVID-19 untuk mencegah penularan dan mengurangi angka kematian akibat paparan virus. Vaksinasi dengan mekanisme berbayar dikhawatirkan dapat menimbulkan masalah etika dan ketimpangan akses masyarakat untuk mendapatkan vaksin (IDN Financials, 2021). Walaupun demikian, sejumlah negara telah menerapkan strategi vaksinasi berbayar, misalnya Singapura yang menyediakan vaksin COVID-19 di klinik swasta dengan biaya administrasi antara SGD 10 (IDR 107.000) hingga SGD 25 (IDR 267.000) dan India yang menyediakan layanan vaksinasi berbayar di rumah sakit swasta dengan harga paling tinggi sebesar INR 1.410 (IDR 274.000; Rahma, 2021).

Vaksinasi berbayar dapat dijalankan apabila situasi bencana darurat dianggap sudah terkendali. Hal ini serupa dengan wabah campak yang sebelumnya mampu diatasi dengan vaksinasi gratis, hingga lambat laun menjadi vaksin berbayar (University of Nevada, n.d.). Pembiayaan vaksinasi COVID-19 selama ini digratiskan

COVID-19 vaccinations, to date, have been borne by the government of the Republic of Indonesia, for all members of the public, as part of the fulfilment of the rights of people, and to control the pandemic (Aini & Widjaja, 2021). Although this is the case, the funds used to cover the costs of COVID-19 vaccination must be allocated effectively so as not to burden the budget. With the news that the government of the Republic of Indonesia has no longer allocated funds specifically for the control the COVID-19 pandemic, in 2023, the plans for the paid-for vaccination program becomes an alternative which may be implemented immediately. From this, studies concerning the willingness to pay for vaccinations became a part of the assessment to determine how great is the willingness of the public to pay personally for vaccination, and just how much individuals are willing to pay.

This study strove to delve into the rationale influencing the willingness of individuals to pay for vaccinations, and the circumstances and conditions under which individuals are willing, or not, to pay; as well as estimating what cost for the vaccination is considered to be within the ability of the public to pay, as references for policy makers. In this way, the study was formulated to answer questions related to: (1) what factors drove individuals from being willing to pay for the COVID-19 booster vaccine; and (2) what factors deterred individuals from being willing to pay for the COVID-19 booster vaccine.

## Method

### Study Participants

The participants in the study comprised 27 people, of ages ranging of 18 - 83 years. The male participants numbered six, and the female participants numbered 21. In a qualitative study, the determination of the minimum number of participants is subjective. According to Braun and Clarke (2013), for a small research project, at least six (and up to 10) participants are required, and this may be increased to achieve data saturation. Data saturation is achieved when the results of the interviews obtained with the participants have uniformity, or achieve saturation point (Merriam & Tisdell, 2015). The authors did not increase the number of participants because the information obtained at the time of the interviews was repetitive, and was evaluated as having achieved saturation point. All participants at the time of the interviews,

oleh pemerintah Republik Indonesia untuk seluruh masyarakat sebagai bagian dari pemenuhan hak individu dan strategi untuk mengontrol pandemi (Aini & Widjaja, 2021). Walaupun demikian, biaya yang digunakan untuk menutupi biaya vaksinasi COVID-19 harus dialokasikan secara efektif agar tidak membebani anggaran. Dengan adanya berita bahwa pemerintah Republik Indonesia tidak lagi mengalokasikan dana khusus untuk pengendalian pandemi COVID-19 di tahun 2023, rencana program vaksinasi berbayar menjadi alternatif yang mungkin akan segera diterapkan. Maka dari itu, studi mengenai kesediaan membayar vaksinasi COVID-19 ini dapat menjadi bagian dari *assessment* untuk mengetahui sejauh mana kesediaan masyarakat membayar sendiri vaksinasi dan pada harga berapa individu bersedia membayar.

Studi ini berusaha menggali alasan yang memengaruhi kesediaan individu membayar vaksin, situasi, dan kondisi yang mendorong individu bersedia atau tidak bersedia membayar, serta berapa estimasi harga vaksin yang dianggap terjangkau oleh masyarakat sebagai referensi pembuat kebijakan untuk mempertimbangkan kisaran harga vaksin jika vaksin menjadi berbayar. Dengan demikian, studi ini dirumuskan untuk menjawab pertanyaan sehubungan dengan: (1) faktor apa saja yang mendorong individu bersedia untuk membayar vaksin *booster COVID-19*; dan (2) faktor apa saja yang menjadi penghalang individu untuk bersedia membayar vaksin *booster COVID-19*.

## Metode

### Partisipan Studi

Partisipan studi terdiri dari 27 individu dengan rentang usia 18 - 83 tahun. Partisipan laki-laki berjumlah enam individu dan partisipan perempuan berjumlah 21 individu. Dalam studi kualitatif, penentuan jumlah minimum partisipan bersifat subjektif. Menurut Braun dan Clarke (2013), untuk proyek penelitian kecil, setidaknya memerlukan enam (sampai 10) partisipan dan dapat bertambah untuk mencapai saturasi data. Saturasi data diperoleh ketika hasil wawancara yang diperoleh dari partisipan memiliki kesamaan atau mencapai titik jenuh (Merriam & Tisdell, 2015). Penulis tidak menambah jumlah partisipan sebab informasi yang diperoleh pada saat wawancara berulang dan dinilai telah mencapai titik saturasi. Seluruh partisipan telah menerima vaksinasi primer minimal dosis pertama, kecuali

Table 1  
*Demographic Characteristics of Study Participants*

| Variable   | Frequency ( <i>n</i> ) | Percentage (%) |
|--|------------------------|----------------|
| Age Group (Years)  |                        |                |
| < 20   | 1                      | 4              |
| 20 - 29  | 5                      | 19             |
| 30 - 39  | 5                      | 19             |
| 40 - 49  | 6                      | 22             |
| 50 - 59  | 4                      | 15             |
| > 60   | 6                      | 22             |
| Sex  |                        |                |
| Male   | 6                      | 22             |
| Female   | 21                     | 78             |
| Residence  |                        |                |
| West Java  | 18                     | 67             |
| DKI Jakarta  | 4                      | 15             |
| Central Java   | 4                      | 15             |
| East Java  | 1                      | 4              |
| Education  |                        |                |
| Primary School   | 2                      | 7              |
| Middle School  | 3                      | 11             |
| High School  | 8                      | 30             |
| Bachelor's Degree  | 11                     | 41             |
| Master's Degree  | 3                      | 11             |
| Employment   |                        |                |
| Civil Servant  | 5                      | 19             |
| Teacher  | 3                      | 11             |
| Private Sector   | 7                      | 26             |
| Self-Employed  | 3                      | 11             |
| Freelancer   | 6                      | 22             |
| Unemployed   | 3                      | 11             |
| Marital Status   |                        |                |
| Married  | 20                     | 74             |
| Single   | 7                      | 26             |
| Monthly Income   |                        |                |
| < IDR 1,000,000.00   | 10                     | 37             |
| IDR 1,000,000.00 - IDR 3,000,000.00                            | 3                      | 11             |
| IDR 3,000,000.00 - IDR 5,000,000.00                            | 7                      | 26             |
| IDR 5,000,000.00 - IDR 7,000,000.00                            | 3                      | 11             |
| > IDR 7,000,000.00   | 4                      | 15             |
| Religion   |                        |                |
| Islam  | 25                     | 93             |
| Protestant   | 2                      | 7              |
| COVID-19 Infection Experience<br>(Personal)                    |                        |                |
| Yes  | 6                      | 22             |
| No   | 21                     | 78             |
| COVID-19 Infection Experience<br>(Family Members or Relatives) |                        |                |
| Yes  | 10                     | 37             |
| No   | 17                     | 63             |
| COVID-19 Vaccination Status                                    |                        |                |
| Dose 1   | 2                      | 7              |
| Dose 2   | 14                     | 52             |
| Dose 3   | 10                     | 37             |
| Never  | 1                      | 4              |



Tabel 1  
*Karakteristik Demografik Partisipan Studi*

| Variabel   | Frekuensi (n) | Persentase (%) |
|--|---------------|----------------|
| <b>Kelompok Usia (Tahun)</b>                             |               |                |
| < 20   | 1             | 4              |
| 20 - 29  | 5             | 19             |
| 30 - 39  | 5             | 19             |
| 40 - 49  | 6             | 22             |
| 50 - 59  | 4             | 15             |
| > 60   | 6             | 22             |
| <b>Jenis Kelamin</b>                                     |               |                |
| Laki-Laki  | 6             | 22             |
| Perempuan  | 21            | 78             |
| <b>Domisili</b>  |               |                |
| Jawa Barat   | 18            | 67             |
| DKI Jakarta  | 4             | 15             |
| Jawa Tengah  | 4             | 15             |
| Jawa Timur   | 1             | 4              |
| <b>Pendidikan</b>  |               |                |
| Sekolah Dasar  | 2             | 7              |
| Sekolah Menengah Pertama                                 | 3             | 11             |
| Sekolah Menengah Atas                                    | 8             | 30             |
| Strata-1   | 11            | 41             |
| Strata-2   | 3             | 11             |
| <b>Pekerjaan</b>   |               |                |
| Aparatur Sipil Negara (ASN)                              | 5             | 19             |
| Guru   | 3             | 11             |
| Karyawan Swasta  | 7             | 26             |
| Wirausahawan   | 3             | 11             |
| <i>Freelance</i>   | 6             | 22             |
| Tidak Bekerja  | 3             | 11             |
| <b>Status Pernikahan</b>                                 |               |                |
| Menikah  | 20            | 74             |
| Sendiri  | 7             | 26             |
| <b>Pendapatan Per Bulan</b>                              |               |                |
| < IDR 1.000.000,00                                       | 10            | 37             |
| IDR 1.000.000,00 - IDR 3.000.000,00                      | 3             | 11             |
| IDR 3.000.000,00 - IDR 5.000.000,00                      | 7             | 26             |
| IDR 5.000.000,00 - IDR 7.000.000,00                      | 3             | 11             |
| > IDR 7.000.000,00                                       | 4             | 15             |
| <b>Agama</b>   |               |                |
| Islam  | 25            | 93             |
| Protestant   | 2             | 7              |
| <b>Pengalaman Terinfeksi COVID-19 (Personal)</b>         |               |                |
| Ya   | 6             | 22             |
| Tidak  | 21            | 78             |
| <b>Pengalaman Terinfeksi COVID-19 (Anggota Keluarga)</b> |               |                |
| Ya   | 10            | 37             |
| Tidak  | 17            | 63             |
| <b>Status Vaksinasi COVID-19</b>                         |               |                |
| Dosis 1  | 2             | 7              |
| Dosis 2  | 14            | 52             |
| Dosis 3  | 10            | 37             |
| Tidak Pernah   | 1             | 4              |

claimed to have received a minimum of the primary dose, with the exception of one individual who suffered a comorbid condition. A large portion of the participants held Bachelor level degrees (41%), and had a median income of IDR 2,500,000.00 (USD 166.63) per month. More detailed demographic data for the participants may be seen in Table 1.

## Study Procedure

The study utilized a qualitative approach with semi-structured interviews, having previously obtained its Research Ethics Approval, Number: 018/FPsi.Komite Etik/PDP.04.00/2022. Participant selection employed the convenience sampling technique, with participants being recruited via the authors' network. The recruitment process was conducted online, via social media sites such as WhatsApp, Facebook, and Instagram, with the distribution of messages and posters containing links to forms indicating willingness to participate in the study.

The study participant data collection process was performed via interview over the period February 23rd to March 11th, 2022. The interviews for this study took between 20 - 74 minutes each. In general, interview durations are normally 30 - 60 minutes, or more (DiCicco-Bloom & Crabtree, 2006). The durations of these interviews were adjusted to the requirements of the study and the abilities of the participants. Recalling that the interviews conducted were semi-structured, their lengths were influenced by participant responses to the questions. A number of interviews took a longer time, because of deeper exploration about strategies for payment, and participant experiences, during the pandemic.

Interviews were conducted virtually, on the platforms of Zoom and WhatsApp (via WhatsApp Call), as well as face-to-face, following health protocols. Prior to the interviews, the participants filled out informed consent forms, as documents of agreement to participation. Interviews took place in Bahasa Indonesia, plus on several occasions the participants used a regional language (Sundanese). The first author also has a fluency of Sundanese, and so was able to follow the progress of the interview and facilitate communication. The results of the interviews were converted into transcripts, and the name of each participant was transcribed, using pseudonyms to ensure the anonymity of the participants.

satu orang partisipan yang ternyata saat wawancara mengakui belum melakukan vaksinasi karena memiliki kondisi komorbid. Sebagian besar partisipan menamatkan pendidikan Strata-1 (41%) dengan median pendapatan IDR 2.500.000,00 per bulan. Data demografi partisipan secara lebih detail dapat dilihat di Tabel 1.

## Prosedur Studi

Studi menggunakan pendekatan kualitatif dengan wawancara semi terstruktur. Studi ini telah memperoleh Surat Keterangan Lolos Kaji Etika Penelitian (*Research Ethics Approval*) dengan Nomor: 018/FPsi.Komite Etik/PDP.04.00/2022. Pengambilan partisipan menggunakan teknik *convenience sampling* yang direkrut melalui jaringan penulis. Proses rekrutmen dilakukan secara daring dengan menyebarkan pesan dan poster yang berisi tautan formulir kesediaan untuk mengikuti studi di media sosial seperti *WhatsApp*, *Facebook*, dan *Instagram*.

Proses pengambilan data partisipan studi melalui wawancara dilaksanakan dalam rentang waktu tanggal 23 Februari 2022 sampai 11 Maret 2022. Tiap wawancara berkisar antara sekitar 20 - 74 menit. Wawancara yang dilakukan kepada partisipan individu secara umum berlangsung sekitar 30 - 60 menit atau lebih (DiCicco-Bloom & Crabtree, 2006). Durasi wawancara disesuaikan dengan kebutuhan studi dan kemampuan partisipan. Mengingat wawancara yang dilakukan adalah wawancara semi terstruktur, lamanya wawancara dipengaruhi oleh tanggapan partisipan ketika merespons pertanyaan. Beberapa wawancara berlangsung lebih lama karena mengeksplorasi lebih jauh mengenai strategi pembiayaan vaksinasi dan pengalaman partisipan selama pandemi.

Wawancara dilakukan secara virtual melalui platform *Zoom* dan *WhatsApp* (melalui *WhatsApp Call*), serta tatap muka dengan mengikuti protokol kesehatan. Sebelum wawancara, partisipan mengisi *informed consent* sebagai lembar persetujuan. Wawancara berlangsung dengan menggunakan Bahasa Indonesia dan beberapa kali partisipan menggunakan bahasa daerah (Bahasa Sunda). Penulis pertama juga menguasai Bahasa Sunda sehingga dapat mengikuti alur wawancara dan memudahkan dalam berkomunikasi. Hasil dari wawancara diubah menjadi transkrip dan nama dari tiap partisipan dituliskan dengan menggunakan pseudonim untuk menjaga kerahasiaan informasi partisipan.

## Data Analysis

The results of the interview transcripts were analyzed thematically. According to Braun and Clarke (2006), thematic analysis is an analytical method which assists in the identification and description of the themes within data, together with its detailed interpretation. The stages commenced with familiarization with the data, in order to understand the answers from the participants, by re-listening to the interview recordings and their written transcriptions. Thereafter, the authors read and verified the interview transcripts against the interview results, in order to ensure nothing had been missed. In the process of the comprehension of the data, the authors also took additional notes, which were annexed to the interview transcripts. After this stage, the authors commenced the initial coding.

The process of the initial coding was conducted by one individual (the first author) using NVIVO 12 software, plus using word frequency to determine which words emerged most frequently in the interview results (for example: “vaccine”, “booster”, “paid-for”, “government”, “afraid”, “travelling”, “information”, “awaiting”, “obligatory”, “assistance”, “subsidy”, and so forth). A number of the words which most frequently emerged were turned into codes, prior to being grouped on the basis of uniformity of meaning. As an example, the authors grouped the answers of participants as: (1) “Vaccination as an administrative precondition”; and (2) “Side-effects of the vaccine being dangerous for the body, in the long term”. “Vaccination as an administrative precondition” tested the matter of the majority of participants stating that the government regulations for them to be vaccinated against COVID-19 caused them to be willing to undergo vaccination, because the government had made COVID-19 vaccination an administrative precondition for travel, and for receiving social assistance. The existence or otherwise of regulations regarding obligatory vaccination determined their incentives for the decisions to be willing to pay for vaccination. “Side-effects of the vaccination on the body in the long term” examined the matter of participants expressing their fears regarding receiving additional vaccinations (let alone paid-for ones) because they had been given information that the side-effects of the vaccine in the long term could be dangerous.

In order to seek the principle themes, the authors conducted intensive discussions, looking at the list of codes which had been made. The authors examined the contexts of the sentences from the codes which had

## Analisis Data

Hasil dari transkrip wawancara dianalisis secara tematik. Menurut Braun dan Clarke (2006), analisis tematik merupakan metode analisis yang membantu mengidentifikasi dan mendeskripsikan tema di dalam data serta menginterpretasikannya secara detail. Tahapan dimulai dari familiarisasi data untuk memahami jawaban dari partisipan dengan mendengarkan kembali rekaman wawancara dan menuliskannya menjadi transkrip. Selanjutnya, penulis membaca dan mencocokkan transkrip wawancara dengan hasil rekaman untuk memastikan tidak ada yang terlewat. Dalam proses memahami data, penulis juga membuat catatan tambahan yang digabungkan dengan transkrip wawancara. Setelah tahap ini, penulis mulai melakukan *initial coding*.

Proses *initial coding* dilakukan oleh satu individu (penulis pertama) dengan perangkat lunak NVIVO 12 plus menggunakan *word frequency* untuk mengetahui kata yang paling banyak muncul dari hasil wawancara (sebagai contoh: “vaksin”, “booster”, “berbayar”, “pemerintah”, “takut”, “bepergian”, “informasi”, “menunggu”, “wajib”, “bantuan”, “subsidi”, dan sebagainya). Sejumlah kata yang paling sering muncul dibuat menjadi kode sebelum dikelompokkan berdasarkan kesamaan makna. Sebagai contoh, penulis mengelompokkan jawaban partisipan sebagai: (1) “Vaksinasi sebagai syarat administrasi”; dan (2) “Efek samping vaksinasi berbahaya bagi tubuh dalam jangka panjang”. “Vaksinasi sebagai syarat administrasi” mengkaji perihal mayoritas partisipan menyebutkan bahwa aturan pemerintah untuk mendapatkan vaksinasi COVID-19 membuat mereka bersedia untuk melakukan vaksinasi karena pemerintah menjadikan vaksinasi COVID-19 sebagai syarat administrasi untuk bepergian dan mendapatkan bantuan sosial. Ada atau tidaknya regulasi wajib vaksinasi menentukan intensi dan keputusan untuk bersedia membayar. “Efek samping vaksinasi berbahaya bagi tubuh dalam jangka panjang” mengkaji perihal partisipan mengutarakan ketakutan mereka untuk mendapatkan vaksinasi tambahan (apalagi dengan cara berbayar) karena menerima informasi bahwa efek samping vaksin dalam jangka panjang akan berbahaya bagi tubuh.

Untuk mencari tema utama, penulis melakukan diskusi intensif dengan melihat daftar kode yang telah dibuat. Penulis memeriksa konteks kalimat dari kode yang muncul untuk mengelompokkannya menjadi tema

emerged, in order to group them into provisional themes. The other codes which had emerged were identified, as to whether they fitted into the existing themes, or were new ones. Sub-themes were arranged by looking at the codes, and the data extracts related to each principle theme. An example of a sub-theme which emerged was the rejection of paid-for vaccination, which originated from a number of codes (danger of side-effects of the vaccine, conspiracies regarding the materials of the vaccines, immunity against COVID-19, the sufficiency of two doses, and so on).

The authors reviewed and compared the themes which had been determined with the entirety of the data. In order to identify the essences of each theme, then conducted analysis, to determine whether the themes were appropriate to the whole of the data, and just which aspects were covered in the themes. This process occurred iteratively on multiple occasions prior to the allocation of brief and clear names to the themes. The results of the data analysis indicated there were two principle themes, these being: (1) the drive factor; and (2) the deterrent factor, which determined willingness to pay for COVID-19 vaccination.

## Results

From the results of the interviews and the thematic analysis, two principle factors were found, which influenced the willingness to pay for the vaccinations; these being: (1) the drive factor, which motivated willingness to pay for the vaccinations, and; (2) the deterrent factor, which made people unwilling to pay for the vaccinations.

### The Driving Factors (Drive)

Three principle motives were found, which supported the drive of participants to be willing to engage in paid-for vaccination. These factors were influenced by: (1) the enforcement of the obligatory vaccination regulations by the government; (2) the realization of the need for the vaccination as a self-protective effort, and; (3) the costs of the vaccination being affordable by the participants. In this study, the participants were more inclined to be willing to pay for COVID-19 vaccinations because of the regulatory or obligation factor. Another portion of the participants felt there was some benefit from the COVID-19 vaccinations, so that they were willing to accept paid-for vaccinations. Although the drive factor was influenced by obligations and self-awareness, the

sementara. Kode lainnya yang muncul diidentifikasi apakah masuk ke dalam tema yang sudah ada, atau menjadi tema yang baru. Sub-tema disusun dengan melihat kode dan *data extract* yang berkaitan dengan tiap tema utama. Contoh sub-tema yang muncul adalah penolakan vaksinasi berbayar yang terdiri dari beberapa kode (bahaya efek samping vaksin, konspirasi bahan vaksin, kebal terhadap virus *COVID-19*, cukup dengan dua dosis, dan sebagainya).

Penulis meninjau kembali dan membandingkan tema yang telah ditentukan dengan keseluruhan data. Untuk mengidentifikasi esensi dari setiap tema, penulis melakukan analisis untuk menentukan apakah tema cocok dengan keseluruhan data dan aspek apa aja yang tercakup pada tema. Proses ini terjadi berulang kali secara iteratif sebelum memberi nama tema secara singkat dan jelas. Hasil dari analisis data mengindikasikan dua tema utama, yaitu: (1) faktor pendorong (*drive*); dan (2) faktor penghalang (*deterrent*), yang menentukan kesediaan membayar vaksin *COVID-19*.

## Hasil

Dari hasil wawancara dan analisis tematik juga ditemukan dua faktor utama yang memengaruhi kesediaan membayar vaksin, yaitu: (1) faktor pendorong (*drive*) yang memotivasi kesediaan membayar vaksin; dan (2) faktor penghalang (*deterrent*) yang membuat individu tidak bersedia membayar vaksin.

### Faktor Pendorong (Drive)

Terdapat tiga motif utama yang mendorong (*drive*) partisipan untuk bersedia melakukan vaksinasi berbayar. Faktor ini dipengaruhi oleh: (1) pemberlakuan aturan wajib vaksinasi dari pemerintah; (2) kesadaran akan kebutuhan vaksin sebagai upaya perlindungan diri; dan (3) harga vaksin yang terjangkau oleh partisipan. Pada studi ini, partisipan lebih terdorong untuk bersedia membayar vaksinasi *COVID-19* karena faktor regulasi atau kewajiban untuk melakukan vaksinasi. Sebagian partisipan lainnya merasakan manfaat dari vaksinasi *COVID-19* sehingga bersedia untuk mendapatkan vaksin dengan cara berbayar. Meskipun faktor pendorong (*drive*) dipengaruhi oleh kewajiban dan kesadaran diri, penentuan harga vaksin akan



determination of the costs of the vaccination influenced just how willing individuals were to pay for them.

### ***Regulations Regarding Obligatory Vaccination for Mobility, Employment, and Social Assistance***

A total of 18 participants stated that their reasons for being willing to accept paid-for COVID-19 vaccination were the regulations from the government and other organizations making the vaccination obligatory. To date, the government of the Republic of Indonesia had made vaccination obligatory for travelers to access public transport, as well as a condition of entry to public places. The participants were willing to pay for the vaccine in order to facilitate mobility, particularly for those participants who frequently travelled out of their cities, as was related by Participant A-27, who was forced to undertake vaccination so as to be able to return home to their village for *Lebaran* (the holiday at the end of the Muslim fasting month, frequently involving a return to the home of one's parents). They stated that they were willing to pay for it when a certificate of vaccination was required for travel.

“In fact I was willing to be vaccinated only as an administrative pre-condition for boarding the aircraft to go home. These days, one needs a certificate of vaccination to travel, so that if then I have to pay, well, so be it.” - (Participant A-27; Aged 27 Years).

Besides the government, institutions and companies also compelled their employees to receive the booster vaccination. This policy was in line with the regulations from the central government to ensure that the movement of officials and employees was unimpeded during travel for work. Indeed, there was a regulation for those who were not yet vaccinated that they were actually not permitted to go to work. Participant D-36 told of a similar situation to that of Participant A-27, regarding the importance of vaccination for travel.

“One of the reasons for COVID-19 vaccination was the demands of my company that we must be able to travel here and there easily. A little while back, my job took me out of the city, indeed to other islands, didn't it? If, for instance, [I] had not been vaccinated, it would have been difficult to board an aircraft, or a ship, to Lampung (city on the southern tip of Sumatera) if, for example, I had no proof of vaccination. If, later on, we have to pay for vaccination, [I] will go along with the rules, because I will need it to be able to travel.” - (Participant D-36; Aged 36 Years).

memengaruhi sejauh mana individu bersedia membayar vaksinasi.

### ***Regulasi Wajib Vaksin Untuk Mobilisasi, Bekerja, dan Bantuan Sosial***

Sebanyak 18 partisipan menyatakan alasan mereka bersedia untuk melakukan vaksinasi *COVID-19* berbayar apabila ada aturan dari pemerintah dan institusi yang mewajibkan vaksinasi. Selama ini, pemerintah Republik Indonesia memberlakukan wajib vaksin bagi pelaku perjalanan untuk mengakses transportasi publik serta syarat untuk masuk ke tempat umum. Partisipan akan bersedia membayar vaksin demi kemudahan mobilisasi, terutama bagi partisipan yang sering bepergian ke luar kota, seperti yang disampaikan oleh Partisipan A-27 yang terpaksa melakukan vaksinasi agar dapat pulang kampung ketika Lebaran. Menurut Partisipan A-27, dirinya akan bersedia membayar vaksin apabila sertifikat vaksin dibutuhkan untuk bepergian.

“Sebenarnya saya bersedia vaksin hanya untuk syarat administrasi naik pesawat untuk pulang. Sekarang untuk bepergian memakai transportasi harus ada sertifikat vaksin, jadi kalau nanti harus bayar, ya bayar saja.” - (Partisipan A-27; Umur 27 Tahun).

Selain pemerintah, instansi dan perusahaan juga mengharuskan pegawainya untuk mendapatkan vaksin *booster*. Kebijakan ini mengikuti aturan dari pemerintah pusat agar mobilisasi pegawai tidak terhambat untuk pergi bekerja. Bahkan terdapat aturan bahwa bagi mereka yang belum melakukan vaksinasi, mereka tidak diperbolehkan untuk bekerja. Partisipan D-36 menyampaikan hal yang serupa dengan Partisipan A-27 mengenai pentingnya vaksin untuk bepergian.

“Salah satunya alasan vaksin *COVID-19* itu karena tuntutan perusahaan supaya kalau kita ke mana-mana gampang. Beberapa waktu lalu kan pekerjaan saya sering ke luar kota bahkan ke luar pulau. Kalau misalnya [saya] tidak vaksin, susah juga kalau mau naik pesawat, kapal laut ke Lampung, tapi tidak ada bukti vaksin. Kalau nanti vaksin berbayar, [saya] ikuti aturannya karena kita butuh juga supaya bisa bepergian.” - (Partisipan D-36; Umur 36 Tahun).

What was related by Participant D-36 showed how, in the context of travel, this became an important matter, so that it caused vaccination to be something needed by the workforce, and employers. This aside, participants agreed to paid-for vaccination because the government had provided free vaccinations from the first to the booster, so that they did not object when vaccination became paid-for. There were also those who were of the opinion that COVID-19 vaccination should still be provided free by the government, as a form of state responsibility for the control of the pandemic. Participant P-73, who was the ex-head of their *Rukun Tetangga* (low-level civil administrative division) stated that the provision of the vaccine during the pandemic should be free, and affordable by all members of the public, because this was a part of the duty of the government to guarantee public health.

Regulations regarding obligatory vaccination at this time were related to the provision of social assistance to the poor and those impacted by the pandemic. According to the participants, a certificate of vaccination was an administrative pre-condition for obtaining social assistance from the government. Social assistance, such as that from the *Program Keluarga Harapan (PKH)* (non-monetary assistance to the very poor) and social assistance aimed at speeding up vaccination, compels the recipients to include a certificate of vaccination in the documents required as part of the obligatory documentation for the receipt of assistance. For those not in possession of a certificate of vaccination, there were administrative sanctions, which delayed, or threatened the cessation of, their social assistance. This information was obtained directly from the participants who were recipients of assistance, as was told by one of the participants.

“...if we were unvaccinated, it was difficult to go to the market, and later on there would be no monetary help. When we collected that assistance, we were asked by the official if we had been vaccinated. So, if later on there is paid-for vaccination, then it just means going along with what the government wants, so that the assistance is not cut off.” - (Participant I-57; Aged 57 Years).

Participant I-57 was a business owner, with uncertain income, and was a recipient of social assistance in cash, which is given to families in financial difficulties and/or those suffering the impacts of COVID-19, the amount of cash assistance being IDR 600,000.00 (USD 40.10). According to Participant I-57, a certificate of vaccination was more important than a national identification card,

Apa yang disampaikan oleh Partisipan D-36 menunjukkan bagaimana dalam konteks pekerjaan, bepergian menjadi bagian yang penting sehingga hal ini menyebabkan vaksin menjadi sebuah kebutuhan bagi tenaga kerja dan pemberi kerja. Selain itu, partisipan menyetujui vaksinasi berbayar karena pemerintah telah mengupayakan vaksinasi gratis dari dosis pertama hingga *booster* sehingga mereka tidak keberatan apabila vaksinasi menjadi berbayar. Ada pula yang berpendapat bahwa vaksinasi COVID-19 sebaiknya tetap digratiskan sebagai bentuk tanggung jawab negara menanggulangi pandemi. Partisipan P-73, yang merupakan seorang mantan Ketua Rukun Tetangga di lingkungan rumahnya, menjelaskan bahwa penyediaan vaksin ketika pandemi seharusnya gratis dan menjangkau seluruh masyarakat karena merupakan bagian dari tugas negara untuk menjamin kesehatan rakyatnya.

Aturan wajib vaksinasi saat ini terhubung dengan proses pemberian bantuan sosial bagi masyarakat miskin dan terdampak pandemi. Menurut partisipan, sertifikat vaksin menjadi prasyarat administrasi untuk pencairan bantuan dari pemerintah. Bantuan sosial seperti Program Keluarga Harapan (PKH) dan bantuan sosial percepatan vaksin mengharuskan penerima untuk menyertakan sertifikat vaksinasi sebagai salah satu dokumen wajib untuk pengambilan bantuan. Bagi yang tidak memiliki sertifikat vaksin, terdapat sanksi administratif yang membuat bantuan sosial mereka tertunda atau terancam dicabut. Informasi ini diperoleh langsung dari partisipan yang merupakan penerima bantuan, seperti yang disampaikan oleh salah satu partisipan.

“...kalau tidak vaksin susah untuk ke pasar dan nanti tidak keluar uang bantuan. Saat ambil bantuan itu ditanyakan sama petugas apakah sudah vaksin. Jadi kalau nantinya vaksin berbayar, ya tinggal mengikuti pemerintah saja asal bantuannya tidak dipotong juga.” - (Partisipan I-57; Umur 57 Tahun).

Partisipan I-57 adalah seorang wirausahawan dengan penghasilan tidak menentu, dan merupakan penerima bantuan sosial tunai yang diberikan kepada keluarga tidak mampu dan atau rentan terkena dampak COVID-19 dengan besaran uang tunai senilai IDR 600.000. Menurut Partisipan I-57, sertifikat vaksin lebih penting daripada kartu tanda penduduk (KTP) karena bantuan

because help would be given only to those welfare recipients who had received at least the first vaccination dose. A similar experience was related by Participant N-41, who had not been able to access their assistance, because they had not had the vaccination.

“Well, now we’re asked about that thing, what do you call it, the vaccination card? So people have their data collected so they can get assistance, but they must be vaccinated, too. When collecting the assistance, we’re questioned by the officials. Well, if you haven’t yet been vaccinated by then, well, it’s turn back again from the post office, to get the vaccine first from the *puskesmas* (public health center). Only then will you be given the envelope of money, after you give over your ID card and the vaccination certificate.” - (Participant N-41; Aged 41 Years).

According to Participant P-73, many people would be willing to undertake vaccination only if there was recompense in the form of cash money and *sembako* (staple food and drink items considered essential).

“*Alhamdulillah* (Thanks be to God) through the policies of the government the vaccinations were free. But here there were still many people unwilling to be vaccinated, even though it was free. Currently, people will be vaccinated because they are given money, [cooking] oil or *sembako*, not because of personal convictions.” - (Participant P-73; Aged 73 Years).

The awareness of the importance of vaccination could not be compared to the need to fulfill daily requirements, so that what was needed was greater inducement to motivate individuals to accept the vaccine. From this, then if, or when, later on, the vaccine has to be paid for, the participants will have no objections to paying out some money, so that they are free of any delay in, or cessation of, the social assistance which they are entitled to receive.

It may be concluded that the implementation of the regulations concerning the obligatory nature of the vaccination, accompanied by sanctions for non-compliance, has great influence in the raising of the willingness to pay for vaccination. The majority of the participants were of the opinion that the sanctions which might be applied if people did not observe the regulations would hinder their activities, such as travelling, working, shopping, attending school, and so forth. A portion of the participants were forced to obey the regulations of the obligatory program to maintain the benefit which

hanya akan diberikan kepada penerima manfaat yang telah melaksanakan vaksinasi minimal dosis pertama. Pengalaman serupa diceritakan oleh Partisipan N-41 yang sempat tidak dapat mencairkan bantuan karena belum melaksanakan vaksinasi.

“Iya sekarang ditanyain itu teh, apa namanya, kartu vaksin. Jadi orang-orang didata buat dapat bantuan tapi dia harus vaksin juga. Saat ambil bantuan itu ditanya sama petugas. Nah, teteh kan belum vaksin waktu itu, jadi balik lagi dari kantor pos, ikutan dulu vaksin di puskesmas. Baru dikasih itu amplop uang setelah kita kasih KTP sama sertifikat vaksin.” - (Partisipan N-41; Umur 41 Tahun).

Menurut Partisipan P-73, banyak warga yang baru bersedia untuk melakukan vaksinasi ketika ada imbalan berupa bantuan uang tunai maupun *sembako*.

“*Alhamdulillah* dengan kebijakan pemerintah vaksin gratis. Tapi di sini masih banyak orang yang tidak mau divaksin meskipun gratis. Sekarang ini orang mau divaksin karena diberi uang, minyak atau *sembako*, bukan karena kesadaran diri.” - (Partisipan P-73; Umur 73 Tahun).

Kesadaran akan pentingnya vaksin tidak sebanding dengan keperluan untuk memenuhi kebutuhan sehari-hari, sehingga diperlukan dorongan yang lebih besar untuk memotivasi individu mendapatkan vaksin. Maka dari itu, apabila vaksin nantinya menjadi berbayar, partisipan tidak keberatan untuk mengeluarkan sejumlah uang agar mereka terhindar dari penundaan atau penghentian bantuan sosial yang seharusnya mereka terima.

Dapat disimpulkan bahwa implementasi regulasi wajib vaksinasi yang disertai sanksi memiliki pengaruh yang besar untuk meningkatkan kesediaan membayar vaksin. Mayoritas partisipan menganggap sanksi yang diterapkan apabila tidak mengikuti aturan akan menghambat aktivitas mereka untuk bepergian, bekerja, berbelanja, sekolah, dan sebagainya. Sebagian partisipan terpaksa mengikuti aturan program wajib vaksinasi untuk mempertahankan keuntungan yang mereka peroleh, yaitu mendapatkan bantuan sosial, dengan catatan harga vaksin berbayar lebih rendah dari nilai

they had received, that being social assistance, with it being noted that the cost of the paid-for vaccinations was lower than the value of the assistance received.

### ***Efforts Towards Self Protection and Increasing Physical Immunity***

Other factors supporting participants' willingness to pay for COVID-19 vaccinations were related to the motive of the desire to obtain additional vaccinations to increase immunity. A total of 13 participants stated they were willing to accept additional paid-for vaccinations to protect themselves against the variants of the virus which might develop, as the efficacy duration of the vaccine was only a number of months. Participant A-58, who previously had been confirmed as being positive for COVID-19, said that the symptoms they had experienced during 10 days of the COVID-19 infection were only mild, such as anosmia and stiffness. At the time of infection, Participant A-58 had had the first dose, whilst their partner, who was also infected, suffered severe symptoms, not having been vaccinated.

“If I hadn't had the vaccination, well, maybe it would have taken me a long time to get well, eh, maybe like my husband, sick for months? As I'd had the first [vaccination], I had some physical immunity. I want to be vaccinated [more] to increase my immunity, [so] I think if the vaccine has to be paid for, I am willing, because [I] am aware of my health.” - (Participant A-58; Aged 58 Years).

Of 13 participants, nine had been exposed to COVID-19 infection, either personally or in members of their families. The symptoms of COVID-19 were different for each individual, and were less serious for those who had received at least the first dose of vaccine. Participant S-57, who had previously contracted the Delta variant of COVID-19, explained that they were willing to pay for the vaccine for self-protection against the severity of the disease, and agreed to there being paid-for vaccine administered periodically, as is the case with the influenza vaccine, because cases of COVID-19 are unpredictable.

“In my opinion, the vaccine is beneficial for protecting me against any COVID-19, which is even worse. When I was positive it was not pleasant. In the beginning, on the first day, I felt constantly *greges-greges* (Javanese, “chilled, shivery, suffering sore joints”), just like the flu. I went to the *puskesmas* and my (oxygen) saturation figure then was 98. However,

bantuan yang diterima.

### ***Upaya Perlindungan Diri dan Peningkatan Imun Tubuh***

Faktor lain yang mendorong partisipan untuk bersedia membayar vaksin COVID-19 terkait dengan motif ingin mendapatkan vaksin tambahan untuk meningkatkan imunitas. Sebanyak 13 partisipan menyatakan bersedia untuk mendapatkan vaksin tambahan secara berbayar untuk melindungi diri dari varian virus yang berkembang karena durasi dari efikasi vaksin hanya bertahan selama beberapa bulan. Partisipan A-58 yang sebelumnya pernah terkonfirmasi positif COVID-19 mengungkapkan bahwa gejala yang dirasakan ketika 10 hari terpapar COVID-19 hanya bersifat gejala ringan seperti anosmia dan pegal. Saat itu, Partisipan A-58 telah mendapatkan vaksin dosis pertama, sedangkan pasangannya yang juga terinfeksi mengalami gejala berat karena belum pernah melakukan vaksinasi.

“Kalau belum vaksin mungkin [saya] lama sembuhnya ya, seperti suami sampai berbulan-bulan. Kalau sudah yang [vaksin] pertama kan sudah ada kekebalan tubuhnya. Saya mau vaksin untuk meningkatkan kekebalan tubuh [jadi] saya kira jika vaksin menjadi berbayar, saya mau karena [saya] sadar kesehatan.” - (Partisipan A-58; Umur 58 Tahun).

Dari 13 partisipan, sembilan partisipan memiliki pengalaman terinfeksi COVID-19, baik dirinya maupun anggota keluarganya. Gejala COVID-19 dirasakan berbeda pada tiap individu dan semakin ringan pada individu yang sudah mendapatkan vaksin minimal dosis pertama. Partisipan S-57 yang pernah terpapar COVID-19 Varian Delta menjelaskan bahwa dirinya rela membayar vaksin untuk melindungi dirinya dari keparahan penyakit dan menyetujui adanya vaksin COVID-19 berbayar secara periodik seperti vaksin influenza karena kasus COVID-19 tidak dapat diprediksi.

“Kalau menurut saya vaksin bermanfaat melindungi diri saya dari COVID-19 yang lebih parah lagi. Waktu itu [pernah] positif, ga enak. Awalnya, hari pertama saya merasa *greges-greges* terus seperti flu. Saya sudah berobat ke puskesmas dan saturasi saya pada saat itu 98. Tetapi, pada hari keempat saya tidak bisa mencium bau, ternyata positif. Kalau [saya]



on the fourth day, I had no sense of smell, I was certainly positive. If I hadn't had the vaccine, maybe I would've had difficulty breathing, like my neighbor. Get the vaccine, no matter if it has to be paid for. I'm willing for the paid-for vaccinations, because I want to be healthy.... I think, myself, an annual [COVID-19] vaccination is necessary. For instance, when going on the *haji* (Islamic pilgrimage), there's the annual vaccination [for meningitis and influenza], and it costs IDR 150,000.00 (USD 10.03)." - (Participant S-57; Aged 57 Years).

Experiences as people exposed to COVID-19 increased the awareness of the participants of the need for receiving additional vaccinations, which could give higher levels of protection than previous ones. Paid-for vaccination was not seen as a problem for some participants, because the most important thing for them was to reduce the risk of dying as a result of contracting COVID-19, and to protect the members of their families in groups such as the aged, those with comorbidities, and children. Participant M-25 and Participant D-41 had similar experiences when family members were infected with COVID-19. Participant D-41 told of how their mother, who had not previously been vaccinated, had to be treated as an inpatient at the hospital, because of being found to be positive to COVID-19, before their subsequent passing. Personal experiences during the pandemic appeared to increase the awareness of and the incentive and willingness of the participants to pay for vaccination, if subsequently it becomes paid-for.

### ***Vaccination Costs That Meet Expectations***

Of the 27 participants, 10 stated that it would be better if the costs of vaccination did not exceed IDR 50,000.00 (USD 3.34) per dose. A total of eight participants were willing to pay between IDR 50,000.00 and IDR 100,000.00 (USD 6.68) to receive the vaccine, and four were willing to pay between IDR 100,000.00 and IDR 300,000.00 (USD 20.50), and three others had no objection to paying more than IDR 300,000.00. Data concerning the costs of vaccinations which participants were willing to pay may be seen in Figure 1. The determination of the price which people were willing to pay was dependent on a number of things, such as: (1) monthly income; (2) knowledge of the participant regarding vaccination; (3) thoughts regarding costs, based upon the costs for antigens and the immunization of children; and (4) comparisons with the cash money received from the social assistance program. Participant E-45 was of the opinion that the costs of the vaccination

belum vaksin mungkin sampai susah napas seperti tetangga saya. Usahakan vaksin, kalau berbayar ya tidak apa-apa, saya bersedia vaksin berbayar karena saya ingin sehat..... Saya rasa untuk diri saya, kalau [vaksin COVID-19] tahunan perlu. Seperti waktu itu kalau untuk haji [ada] vaksin tahunan [meningitis dan influenza] itu bayar IDR 150.000,00." - (Partisipan S-57; Umur 57 Tahun).

Pengalaman sebagai penyintas COVID-19 telah meningkatkan kesadaran partisipan untuk mendapatkan vaksin tambahan yang mampu memberikan tingkat perlindungan lebih tinggi dari sebelumnya. Vaksinasi berbayar tidak dipermasalahkan oleh partisipan karena faktor terpenting bagi mereka adalah mengurangi risiko kematian akibat COVID-19 dan melindungi anggota keluarga yang termasuk ke dalam kelompok rentan seperti lansia, penderita komorbid, dan anak-anak. Partisipan M-25 dan Partisipan D-41 memiliki pengalaman serupa ketika anggota keluarganya terinfeksi COVID-19. Partisipan D-41 menceritakan bagaimana ibunya yang belum pernah vaksin harus dirawat inap di rumah sakit karena positif COVID-19 sebelum akhirnya meninggal dunia. Pengalaman personal selama pandemi ternyata meningkatkan kesadaran dan intensi partisipan untuk membayar vaksin jika nantinya menjadi berbayar.

### ***Harga Vaksin yang Memenuhi Harapan***

Dari 27 partisipan, 10 di antaranya menyatakan bahwa sebaiknya harga vaksin tidak melebihi IDR 50.000,00 untuk satu kali dosis. Sejumlah delapan partisipan bersedia membayar antara IDR 50.000,00 sampai IDR 100.000,00 untuk mendapatkan vaksin, sejumlah empat partisipan bersedia membayar vaksin dengan kisaran harga antara IDR 100.000,00 hingga IDR 300.000,00, dan tiga partisipan lainnya tidak keberatan untuk membayar vaksin dengan harga lebih dari IDR 300.000,00. Data mengenai harga vaksin yang bersedia dibayarkan oleh partisipan dapat dilihat pada Gambar 1. Penentuan harga yang bersedia dibayarkan oleh partisipan ditentukan oleh beberapa hal, seperti: (1) pendapatan bulanan; (2) pengetahuan partisipan mengenai vaksin; (3) perkiraan harga berdasarkan biaya antigen dan imunisasi anak-anak; serta (4) pertimbangan dari uang tunai yang didapatkan dari program bantuan sosial. Partisipan E-45 berpendapat bahwa harga vaksin

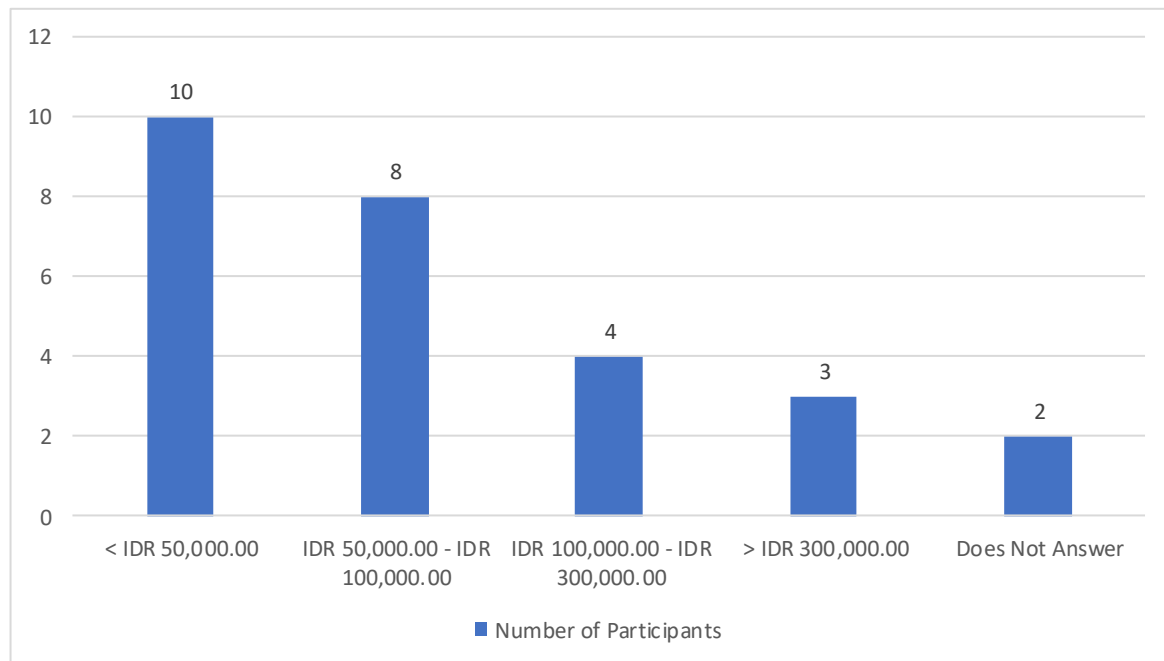


Figure 1. Vaccine prices that the study participants are willing to pay for.

should be in line with the costs of child vaccination. The varying costs of vaccinations were dependent upon where the vaccine was administered. At a *puskesmas*, the costs of medicines or services are normally lower compared to those at private hospitals.

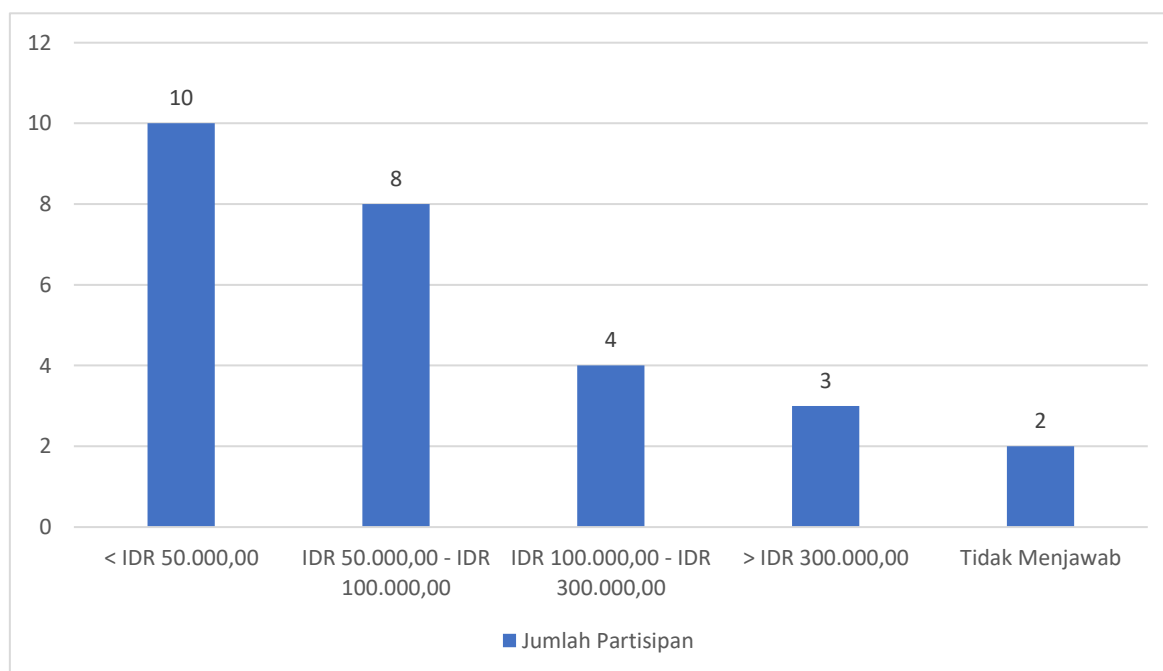
“As for me, personally, I can probably pay for the vaccine, but that is not the case for the middle and lower classes, who are not so able. So, as for paying [for the COVID-19 vaccination], firstly, how much? Costs of vaccinations for children are currently varied. For a vaccination without a feverish effect, that can be around IDR 500,000.00 (USD 33.42). For a vaccine causing fever, that can be around IDR 100,000.00 to IDR 200,000.00 (USD 13.37). The vaccination place also has an influence, because at a *puskesmas* it’s much cheaper than at a hospital. Maybe for the paid-for booster vaccination (COVID-19), we’d want different prices, like that. The standards are like this, an antigen test is currently IDR 100,000.00, so many people take the antigen test, compared to the PCR, which costs IDR 270,000.00 (USD 18.05). So, for paid for [COVID-19] vaccination, so that people will be more willing to have it, in my opinion the costs should be under IDR 100,000.00, or like that, as a standard.” - (Participant E-45; Aged 45 Years).

Other considerations in determining the costs of vaccinations were based upon the maximum costs of the

COVID-19 dapat mengikuti skema harga imunisasi pada anak-anak. Harga vaksin variatif tergantung tempat vaksin dilakukan. Di Pusat Kesehatan Masyarakat (Puskesmas), harga obat atau layanan biasanya relatif lebih murah daripada di rumah sakit swasta.

“Kalau saya pribadi mungkin bisa bayar vaksin, tapi balik lagi kasian ke masyarakat menengah ke bawah yang kurang mampu. Makanya kalau bayar [vaksinasi COVID-19] berapa dulu? Vaksin anak-anak yang sekarang saja harganya berbeda-beda. Kalau vaksin dengan tidak ada efek demam, itu bisa sampai IDR 500.000,00. Kalau vaksin dengan efek demam itu sekitar IDR 100.000,00 sampai IDR 200.000,00. Tempat vaksinasi juga berpengaruh karena di puskesmas itu jauh lebih murah dibandingkan dengan di rumah sakit. Mungkin ya untuk vaksin booster (COVID-19) berbayar kalau mau harganya dibedakan seperti itu. Patokannya gini aja, tes antigen sekarang misalnya IDR 100.000,00, makanya banyak orang yang tes antigen dibanding PCR yang harganya IDR 270.000,00. Jadi untuk vaksin [COVID-19] berbayar, supaya orang-orang lebih mau vaksin menurut saya harganya dibawah IDR 100.000,00 atau gitu aja patokannya.” - (Partisipan E-45; Umur 45 Tahun).

Pertimbangan lain dalam menentukan harga vaksin didasarkan pada harga tertinggi tes antigen, seperti yang



*Gambar 1.* Harga vaksin yang bersedia dibayarkan oleh partisipan studi.

antigen test, as was noted by Participant A-27, who was willing to pay a maximum of IDR 150.000,00 (USD 10.03). Other participants, who had heard of, or made efforts to find out about, the prices of paid-for vaccines, suggested higher costs, such as Participant M-25 and Participant P-37 who were willing to pay for vaccinations costing above IDR 300.000,00. The participants who suggested IDR 50.000,00 as the price for COVID-19 vaccine argued that the costs of vaccination must be cheap and affordable for all members of the public, so that all have an even chance to obtain them. The conditions and the situation during the pandemic made it economically difficult for people, so that the financial abilities of members of the public must receive attention when the costs of vaccinations are being determined.

A number of participants showed unwillingness when asked to speak about vaccination costs, as they were worried that the paid-for vaccination program might be implemented. For some participants, paying for vaccination would be a separate problem, because they thought more about meeting daily needs than the need to obtain the COVID-19 vaccine, which previously had been obtained at no cost. Participant A-48 was not willing to pay for vaccination, as the money required to pay for it had already been allocated to household needs.

“Well, let’s say the costs of the paid-for booster vaccine will be high, but we don’t yet know if that is

disampaikan oleh Partisipan A-27 yang bersedia membayar vaksin dengan harga maksimum sebesar IDR 150.000,00. Partisipan lainnya yang pernah mendengar atau mencari tahu harga vaksinasi berbayar memberikan kisaran harga yang lebih tinggi, seperti Partisipan M-25 dan Partisipan P-37 yang bersedia membayar vaksin dengan harga di atas IDR 300.000,00. Partisipan yang mengajukan harga IDR 50.000,00 untuk biaya vaksin COVID-19 berargumen bahwa biaya vaksinasi harus terjangkau dan murah bagi masyarakat agar seluruh masyarakat memiliki kesempatan yang setara untuk mendapatkan vaksin. Kondisi dan situasi selama pandemi membuat masyarakat kesulitan secara ekonomi sehingga biaya vaksinasi harus memperhatikan kemampuan finansial masyarakat.

Sebagian partisipan menunjukkan keraguan ketika diminta menyebutkan biaya vaksin karena khawatir program vaksinasi berbayar direalisasikan. Bagi sebagian partisipan, membayar vaksin menjadi beban tersendiri karena mereka lebih memikirkan pemenuhan kebutuhan sehari-hari dibandingkan kebutuhan untuk mendapatkan vaksin COVID-19 yang sebelumnya diperoleh secara cuma-cuma. Partisipan A-48 tidak bersedia untuk membayar vaksin karena uang untuk mendapatkan vaksin dapat dialokasikan untuk memenuhi kebutuhan rumah tangga.

“Katanya kalau vaksin *booster* yang bayar itu mahal, tapi tidak tahu benar atau tidaknya. Kalau menurut

the case or not. In my opinion, it would be a great pity if [our money] was used for the vaccine; it would be better to use it to buy a sack of rice. The vaccine would not satisfy [the stomachs of] my family.” - (Participant A-48; Aged 48 Years).

Participant F-40 was of the same opinion. They prioritized buying rice, as a staple, to maintain life. For that, the determination must be that the costs of vaccination are affordable, and that it must be accessible to all. From the results of the interviews, a number of recommendations emerged, to cut the costs of the paid-for vaccinations, such as that of a cross-subsidy in the payment for the vaccine, the application of varying costs for vaccination, dependent upon the place where the vaccine was supplied, and payment through health insurance.

### **The Detering Factors (Deterrent)**

Not all participants were willing to pay for COVID-19 vaccination, and this was caused by three deterrent factors, these being: (1) worry about the side-effects of the vaccine on the body; (2) misinformation about the contents of the vaccine; and (3) participants feeling that they already had bodily immunity after receiving two doses. Although all participants had some knowledge about the benefits of the COVID-19 vaccine, the high perception of the risks of the vaccinations reduced the willingness to pay for it. The overblown framing of the information concerning the side-effects and the composition of the vaccine made participants afraid to accept the vaccine, let alone pay for it. Besides this, other participants are convinced that two doses of vaccine should make them immune to the virus, so that they do not wish to pay for further doses.

### **Vaccine Side-Effects**

At the time the interviews were conducted, registration for the booster vaccination had not long been announced by the government of the Republic of Indonesia. At that time, there was a lot of information circulating concerning the side-effects of the booster vaccination, which was said to cause illnesses or even death. The influence of this fear-causing information regarding side-effects of the booster persuaded seven participants, who stated they were not willing to pay for the vaccine. The fear about side-effects was made even worse by the testimonies of individuals who had already received the boosters, and experienced side-effects worse than those from the first and second vaccinations.

saya, sayang sekali kalau [uang] digunakan untuk vaksin, lebih baik untuk beli beras satu karung. Vaksin belum tentu bikin keluarga [perutnya] kenyang.” - (Partisipan A-48; Umur 48 Tahun).

Pendapat Partisipan A-48 sama dengan pendapat Partisipan F-40, yang mengutamakan untuk membeli beras sebagai bahan pokok untuk bertahan hidup. Untuk itu, penentuan harga vaksin sebaiknya terjangkau dan dapat diakses oleh seluruh kalangan. Dari hasil wawancara, beberapa saran muncul untuk mengurangi kemungkinan mahalnya vaksin berbayar, seperti subsidi silang dalam pembiayaan vaksin berbayar, menerapkan harga vaksin yang berbeda tergantung dari tempat penyedia vaksin, dan pembiayaan melalui asuransi kesehatan.

### **Faktor Penghalang (Deterrent)**

Tidak semua partisipan bersedia untuk membayar vaksinasi *COVID-19*, dan hal tersebut disebabkan oleh tiga faktor penghalang (*deterrent*), seperti: (1) kekhawatiran akan efek samping vaksin bagi tubuh; (2) misinformation mengenai kandungan vaksin; dan (3) partisipan merasa sudah memiliki kekebalan tubuh setelah mendapat dua dosis vaksin. Meskipun seluruh partisipan memiliki pengetahuan akan manfaat vaksinasi *COVID-19*, persepsi risiko yang tinggi terhadap efek vaksinasi menurunkan kesediaan membayar. *Framing* informasi yang berlebihan mengenai efek samping dan komposisi vaksin membuat partisipan takut untuk mendapatkan vaksinasi terlebih dengan cara berbayar. Selain itu, partisipan lainnya meyakini bahwa dua dosis vaksin mampu membuat mereka kebal terhadap virus sehingga mereka tidak berkeinginan untuk membayar vaksin lanjutan.

### **Efek Samping Vaksin**

Saat wawancara dilaksanakan, pendaftaran untuk vaksinasi *booster* belum lama dirilis oleh pemerintah Republik Indonesia. Saat itu, banyak informasi beredar mengenai efek samping vaksin *booster* yang diberitakan membuat sakit hingga meninggal dunia. Pengaruh informasi yang menakutkan akan efek samping vaksin *booster* ini memengaruhi tujuh partisipan yang menyatakan tidak bersedia untuk membayar vaksin. Ketakutan akan efek samping vaksin diperparah oleh testimoni dari individu lain sekitar mereka yang telah mendapatkan vaksin *booster* dan mengalami efek samping yang lebih berat daripada vaksin dosis pertama dan kedua.



“They said that, after getting a booster it was easy to fall ill. I heard from people that, after getting the booster, there were many who were feverish and had bodily aches for a week. If we had to pay to get the vaccine, then instead got sick, what was it for? It was better not to have to [pay for] the booster vaccine.” - (Participant A-48; Aged 48 Years).

It was the absence of credible information, and the framing of that available information, which inflated the reporting of cases of side-effects, increasing the unwillingness of participants. Participant F-40 saw news on one social media website about someone who complained they had broken out in red spots all over the body, post booster vaccination. Other news even highlighted cases of death after COVID-19 booster vaccination. In the opinion of Participant K-24, much of the news consumed by the public was hoax, and the public easily believed it, because the framing of the information made them convinced that the rumors they received were accurate. The overblown news and the misinformation about side-effects were some of the hindrances to participants being willing to pay for the vaccine, because it was considered dangerous for their health, through both long-term and short-term effects.

### ***Issues About Vaccine Contents***

The misinformation received by participants, was not only about side-effects, but also concerning the allegedly non-*halal* and dangerous chemical element contents of the vaccine. Three of the participants explicitly expressed opinions that the news of the contents made them unwilling to pay for the vaccine. This also was expressed by Participant A-34, who did not believe in the vaccine, because they had heard that it was made from materials related to pigs, which are forbidden for consumption by their religion.

“[I was] as if not willing [to pay for the COVID-19 Vaccination]. It was only the threat that if I didn’t pay for it things would be difficult, and it would be easy to be infected. There were lots who didn’t believe in the [COVID-19] vaccine. I got information on WhatsApp sent by a friend, saying the [COVID-19] vaccine contained pig [products], and that those who had had the vaccinations then contracted COVID-19. So, what could I do, let alone as a Muslim, just think about it first.” - (Participant A-34; Aged 34 Years).

Although Participant A-34 did not plan on getting the booster vaccine, and refused to discuss paid-for

“Katanya setelah *booster* nanti gampang sakit. Saya dengar dari orang-orang setelah vaksin *booster* banyak yang sakit meriang dan sakit badan selama seminggu. Kalau harus bayar untuk dapat vaksin terus malah sakit buat apa? Lebih baik tidak perlu [bayar] vaksin *booster*.” - (Partisipan A-48; Umur 48 Tahun).

Informasi yang belum tentu kredibel dan *framing* berita yang membesarkan kasus dari efek samping vaksin meningkatkan kecemasan partisipan. Partisipan F-40 melihat berita di salah satu media sosial mengenai individu yang mengeluh muncul bintik merah di seluruh tubuh pasca vaksinasi *booster*. Berita lainnya bahkan menyoroti kasus kematian setelah vaksinasi *booster COVID-19*. Menurut pendapat Partisipan K-24, berita yang dikonsumsi oleh publik banyak yang bersifat hoaks dan masyarakat mudah percaya karena *framing* informasi membuat individu meyakini berita yang diterimanya sebagai berita benar. Berita yang berlebihan dan misinformasi mengenai efek samping vaksin menjadi salah satu penghalang yang membuat partisipan enggan membayar vaksin karena dianggap berbahaya bagi kesehatan mereka, baik efek jangka pendek maupun jangka panjang.

### ***Isu Kandungan Vaksin***

Misinformasi yang diterima partisipan tidak hanya mengenai efek samping vaksin, tetapi juga berita mengenai kandungan vaksin yang tidak halal dan berisi zat kimia berbahaya. Sebanyak tiga orang partisipan secara eksplisit berpendapat bahwa informasi mengenai kandungan vaksin membuat mereka tidak bersedia untuk membayar vaksin. Hal ini juga diungkapkan oleh Partisipan A-34 yang tidak percaya dengan vaksin karena pernah mendengar vaksin terbuat dari bahan yang berhubungan dengan babi, yang dilarang untuk dikonsumsi oleh agamanya.

“Sepertinya [saya] tidak bersedia [membayar vaksinasi *COVID-19*]. Itu hanya ancaman saja kalau tidak bayar vaksin nanti susah dan gampang terinfeksi. Banyak kok yang tidak percaya sama vaksin [*COVID-19*]. Saya kan pernah tuh dapat informasi dari *WhatsApp* dikirimin teman katanya vaksin [*COVID-19*] mengandung babi, terus yang sudah vaksin masih kena *COVID-19*. Jadi gimana ya, apalagi kita muslim kan pikir-pikir dulu aja.” - (Partisipan A-34; Umur 34 Tahun).

Meskipun Partisipan A-34 tidak berencana untuk mendapatkan vaksin *booster* dan menolak adanya

vaccination, they had had a second vaccination, because the place where they worked had made it obligatory for all employees to have the primary doses (first and second). According to Participant A-34, many others around them were also skeptical about the composition of the vaccine, which originated from the Peoples' Republic of China. Other participants refused the vaccinations, because they were more inclined towards alternatives, those made from natural materials.

“[I] wasn't willing to have any vaccination, free or paid-for, I didn't want it because [I felt my] body would get weak, if it was invaded by chemicals. I felt like a chicken, which was always getting injected. In my opinion, people would be weak, too, [if injected with the vaccine], better to rely on 'back to nature', just rely on herbal [remedies]. There's no need to pay for natural [remedies].” - (Participant S-30; Aged 30 Years).

According to Participant S-30, the use of natural ingredients would be better, compared to the use of chemicals, even though they did not specifically state what type of things or what substances were considered dangerous. Besides the *halal* or otherwise problems regarding the composition of the vaccine, the effect of the framing of information about the composition of the vaccine, and that it might contain materials dangerous to the body, were worries for participants, and made them reluctant to pay for vaccination.

### ***Sufficiency of Two Primary Vaccine Doses***

Another factor which was an impediment to people being willing to pay for the vaccinations was the perception that it was sufficient to undergo vaccination twice (two doses). Four participants were certain that two doses of the vaccination were sufficient to achieve immunity to COVID-19 infection. This aside, at the time the interviews were conducted, the regulations about the obligatory booster vaccinations had not been set in place by the government, so that participants felt that they were under no obligation to receive a booster. There were many participants who were willing to pay for the vaccine, if indeed there had been regulations enacted to make paying for it obligatory. However, if the option to receive a paid-for vaccination was not obligatory, the intention to pay for it would be slight, because there was no incentive for them to do this.

“Personally, I was not willing to pay for the vaccination. It is not yet certain that paid-for vaccination would

wacana program vaksinasi berbayar, dirinya telah mendapatkan vaksin dosis kedua karena perusahaan tempatnya bekerja mewajibkan seluruh pegawai untuk mendapatkan vaksin primer (dosis pertama dan kedua). Menurut Partisipan A-34, banyak individu lain di sekitarnya yang juga skeptis dengan komposisi vaksin yang berasal dari Republik Rakyat Cina. Partisipan lain menolak vaksin karena lebih memilih alternatif yang berbahan alami.

“Tidak bersedia, mau vaksin gratis atau berbayar, saya tidak mau karena [saya merasa] capek tubuhnya dimasukkan bahan kimia. Saya merasa seperti ayam yang terus-menerus disuntik. Menurut saya orang-orang juga sama capek [disuntik vaksin], lebih baik mengandalkan back to nature, minum yang herbal lagi. Tidak perlu bayar kalau yang alami.” - (Partisipan S-30; Umur 30 Tahun).

Menurut Partisipan S-30, penggunaan bahan alami akan lebih baik dibandingkan bahan kimia, meskipun tidak spesifik menyebutkan jenis atau zat yang dianggap berbahaya. Selain masalah halal tidaknya komposisi vaksin, efek *framing* mengenai kandungan vaksin yang berisi bahan berbahaya bagi tubuh menjadi kekhawatiran partisipan dan membuat mereka enggan membayar vaksin.

### ***Dua Dosis Vaksinasi Primer Sudah Cukup***

Faktor lainnya yang menjadi penghalang untuk bersedia membayar vaksin adalah persepsi bahwa vaksinasi cukup dilakukan dua kali (dua dosis). Sebanyak empat partisipan meyakini bahwa dua dosis vaksin sudah cukup untuk membuatnya kebal dari infeksi COVID-19. Selain itu, regulasi wajib vaksinasi *booster* saat wawancara belum ditetapkan oleh pemerintah sehingga partisipan merasa tidak berkewajiban untuk melakukan vaksinasi *booster*. Banyak dari partisipan yang bersedia membayar vaksin jika memang ada aturan yang mewajibkan untuk mendapatkan vaksin berbayar. Namun, jika opsi vaksinasi berbayar bersifat tidak wajib, intensi untuk membayar vaksin akan rendah karena tidak ada dorongan bagi partisipan untuk melakukannya.

“Kalau pribadi sih tidak bersedia bayar vaksin. Vaksin berbayar belum tentu membantu kita untuk

make us immune, could not guarantee this either. We had had the first and second vaccinations, so that was enough, rather than later being overdosed with immunity because of being vaccinated many times.” - (Participant R-26; Aged 26 Years).

Participant R-26 argued that implementing vaccination on a paid-for basis would not be able to ensure people being fully protected from the spread of COVID-19. Vaccination would certainly not initially give 100% protection against COVID-19 infection, but repeated vaccination would increase its effectiveness, by training the physical immune system to respond to the mutated variants of the virus. The feeling of those participants who felt they were already immune, thanks to the primary vaccinations, has a correlation with the bringing into force of the regulations related to obligatory vaccination. When the government enforced the vaccination program to only the second dose, participants felt that they did not need subsequent vaccinations, because it was not obligatory, or it was “considered to be *sunah*” (Islam; a deed having merit but not being obligatory), which, if performed, would attract a reward, but, if it were not performed, this would not attract sanctions.

Findings from this study gave a picture that the knowledge of participants of the benefits of the vaccinations was no guarantee that they would be willing to pay it. The distribution of inaccurate information reduced the perception of the risks, which made them optimistically biased about the spread of COVID-19. An excessive amount of hoax news raised their unwillingness to receive subsequent paid-for vaccination. Besides this, there was the opinion that the risk of being infected with COVID-19 was lower, if they had already received some vaccine. A number of these factors became the deterrence factor, which rejected any discussion of paid-for vaccination. Although this was the case, the drive factor was able to change perceptions, and strengthen the arguments for the participants towards being willing to pay for vaccinations in order to avoid the consequences of restrictions to mobility and ensure the receipt of social assistance, besides obtaining the health benefits from the vaccine itself.

## Discussion

The principle goals of this study were to explore the factors supporting, and those reducing, the willingness of people to pay for COVID-19 vaccination, when previous doses were provided free, as well as to examine

kebal, tidak bisa menjamin juga sih. Kita sudah vaksin pertama dan kedua, itu cukup, daripada nanti overdosis imun karena banyak divaksin.” - (Partisipan R-26; Umur 26 Tahun).

Partisipan R-26 berargumen bahwa melakukan vaksinasi dengan sistem berbayar tidak dapat mencegah individu untuk terhindar sepenuhnya dari paparan COVID-19. Fungsi vaksinasi memang tidak 100% memberikan perlindungan terhadap infeksi COVID-19, tetapi vaksinasi secara berkala akan meningkatkan efektivitas vaksin untuk melatih sistem kekebalan tubuh dalam merespons varian virus yang bermutasi. Pandangan partisipan yang merasa sudah kebal dengan vaksinasi primer berkorelasi dengan pemberlakuan aturan wajib vaksinasi. Ketika pemerintah hanya mewajibkan program vaksinasi sampai dosis kedua, partisipan merasa tidak memerlukan vaksinasi lanjutan karena sifatnya tidak wajib atau “dianggap *sunah*” yang apabila dilakukan akan mendapatkan imbalan, tetapi apabila tidak dilakukan, maka tidak ada sanksi.

Temuan dari studi ini memberikan gambaran bahwa pengetahuan partisipan akan manfaat vaksin tidak memberikan jaminan bahwa mereka akan bersedia untuk membayar vaksinasi COVID-19. Penyebaran informasi yang tidak akurat mengenai vaksinasi menurunkan persepsi risiko yang membuat individu bias optimisme akan tertular COVID-19. Berita hoaks yang berlebihan meningkatkan keraguan partisipan untuk mendapatkan vaksinasi lanjutan secara berbayar. Selain itu, terdapat anggapan bahwa risiko terinfeksi COVID-19 lebih rendah apabila sudah pernah mendapatkan vaksin. Sejumlah faktor ini yang menjadi penghalang (*deterrence*) untuk menolak wacana vaksinasi berbayar. Walaupun demikian, faktor pendorong (*drive*) mampu mengubah persepsi dan memperkuat argumentasi partisipan untuk bersedia membayar vaksinasi agar terhindar dari konsekuensi pembatasan mobilisasi dan mendapatkan bantuan sosial, selain memperoleh manfaat kesehatan dari vaksinasi itu sendiri.

## Diskusi

Tujuan utama dari studi ini adalah mengeksplorasi faktor yang mendorong dan menghambat kesediaan individu membayar vaksin COVID-19 ketika dosis vaksin sebelumnya tersedia secara gratis, serta

estimates of what price for vaccination was affordable. The study found that the majority of the participants were willing to pay, in efforts to avoid sanctions which would restrict their access to public transport and public spaces, such as schools, parks, shopping centers and office blocks. A number of participants wanted supplementary vaccinations because of their personal experiences of having been infected with COVID-19, or people close to them having become victims of the virus. These experiences supported people in their willingness to pay for the vaccinations in order to protect themselves and vulnerable groups, so as to have better antibodies than previously was the case. The problem of the determination of the costs for all members of the public was also an issue, because there had previously been no initial cost for the vaccine, and this made them speculate as to what information was circulating, regarding the vaccination costs. The discussion about costs was based upon personal situations, and comparisons with the costs of antigen tests and the immunization of children. As for the factors which precluded the willingness of people to pay for the vaccinations, these were related to the framing of information about side-effects and the composition of the vaccine.

Even though all participants knew about the benefits of the vaccinations, the comprehension and perception of the benefits of the vaccinations were not the principle factors making individuals willing to pay for them. The participants reported that they depended upon the policies of the government, which compelled them to pay. The obligation to have paid-for vaccinations were more readily accepted by participants because, previously, there had been regulations requiring acceptance of the vaccine as an administrative pre-condition to the ongoing receipt of social assistance, and for travel. The results of this study were in line with those of that by Attwell et al. (2022), which stated that the public would more readily accept regulations obligating vaccination which were accompanied by restrictions to access and mobility, because they were familiar with similar regulations.

At the time the obligatory booster vaccination program was implemented as an alternative, several participants felt no necessity to accept it, because there had previously been no accompanying sanctions. The portion of participants who were willing to pay for vaccinations were not fully so motivated by health concerns, but strove to avoid any negative consequences which might be imposed were they to reject the paid-for vaccination scheme. Through the application of the regulation concerning obligatory paid-for vaccination,

menyelidiki berapa estimasi harga vaksin yang terjangkau. Studi ini menemukan bahwa mayoritas partisipan bersedia membayar vaksin karena berusaha menghindari sanksi yang membatasi mereka dalam mengakses transportasi umum dan ruang publik, seperti sekolah, taman, pusat perbelanjaan, dan perkantoran. Sebagian partisipan menginginkan vaksin tambahan karena memiliki pengalaman personal pernah terinfeksi COVID-19 atau kerabatnya pernah menjadi penyintas COVID-19. Pengalaman ini mendorong individu untuk bersedia membayar vaksin demi melindungi diri sendiri dan kelompok rentan, agar memiliki antibodi yang lebih baik dari sebelumnya. Masalah penetapan harga yang terjangkau bagi seluruh masyarakat juga menjadi isu karena belum adanya harga awal vaksin COVID-19 membuat individu menerka kisaran biaya vaksin. Kisaran biaya tersebut berdasarkan situasi personal dan perbandingan harga dengan tes antigen serta imunisasi pada anak-anak. Adapun faktor yang menghambat individu untuk bersedia membayar vaksin berhubungan dengan *framing* informasi mengenai efek samping dan komposisi vaksin.

Meskipun seluruh partisipan mengetahui manfaat vaksin COVID-19, pemahaman dan persepsi akan manfaat vaksin tidak menjadi faktor utama yang membuat individu bersedia membayar vaksin. Partisipan melaporkan bahwa mereka bergantung kepada kebijakan pemerintah yang mengharuskan mereka untuk membayar vaksin. Wajib vaksinasi berbayar lebih diterima oleh partisipan karena sebelumnya sudah ada regulasi wajib vaksinasi untuk syarat administrasi menerima bantuan sosial dan bepergian. Hasil studi ini sejalan dengan studi Attwell et al. (2022), yang menyatakan bahwa masyarakat lebih menerima aturan wajib vaksinasi yang disertai pembatasan akses dan mobilisasi karena masyarakat sudah terbiasa dengan regulasi serupa.

Saat program wajib vaksinasi *booster* dijadikan sebagai alternatif, beberapa partisipan merasa tidak perlu melakukannya karena belum ada sanksi yang menyertai. Sebagian partisipan yang bersedia membayar vaksin tidak sepenuhnya termotivasi untuk tujuan kesehatan, tetapi berupaya menghindari konsekuensi negatif yang mungkin diterima apabila menolak skema program vaksinasi berbayar. Melalui penerapan aturan wajib vaksinasi berbayar, pemerintah dapat menyatukan kepentingan sosial dan kesehatan demi mencapai *herd*



the government could unify social and health interests, in order to achieve herd immunity, and bring an end to the pandemic. This matter needs to receive attention in making compulsory paid-for vaccination regulations safe and affordable to the public. These findings were consistent with those of previous studies concerning the importance of a safe vaccine, as one of the pre-conditions for paid-for vaccination (Cheng, 2022; Wang et al., 2021; Ward et al., 2022; World Health Organization [WHO], 2021a).

Besides the application of sanctions, individuals were encouraged to retain their benefits through the incentive of social assistance, which might be received through compliance with a program of obligatory vaccination. In the primary vaccination program, (first and second doses), a proof of vaccination certificate was part of the administrative requirements for the payment of assistance. The strategy of obligatory vaccination, with the provision of incentives, was not compulsory, because it relied more on “persuasion” to accept the vaccination (Savulescu et al., 2021). An approach in this way could motivate public health behavior to comply with a program of obligatory paid-for vaccination, with acceptably determined incentives having a higher cost than the paid-for vaccination. This finding was in line with the study by Campos-Mercade et al. (2021), which conducted an experiment on the influence of monetary incentives being able to increase the level of vaccination, although this study did not suggest that the individuals had to be paid to accept the vaccinations. There has as yet not been any specific study which measured the influence of monetary incentives on willingness to pay for vaccination. However, a number of previous studies have investigated the existence of influences incentivizing people to get vaccinations (Cerde & García, 2021; Savulescu et al., 2021; Smith et al., 2021).

Besides the influence of regulations, and their connection to restrictions on access, as well as the use of incentives, the desire to increase physical immunity and to the prevent riskier dangers arising from the spread of COVID-19 supports the willingness to pay for vaccination. Direct and indirect experience of surviving COVID-19 has raised the perception of the risk of the virus. The fear of infection and its more serious symptoms have increased the possibility that people will be willing to pay for vaccination, and indeed at a higher price (Cerde & García, 2021; Nguyen et al., 2021). Direct payment for vaccination is useful not only for personal protection from the risks and losses possibly suffered if infected by COVID-19, but also in an effort

*immunity* dan menghentikan pandemi. Hal yang perlu diperhatikan dalam membuat aturan wajib vaksin berbayar adalah masalah akses penyediaan vaksin yang terjangkau dan aman bagi masyarakat. Temuan ini konsisten dengan studi sebelumnya mengenai pentingnya vaksin yang aman sebagai salah satu syarat penyediaan vaksin berbayar (Cheng, 2022; Wang et al., 2021; Ward et al., 2022; World Health Organization [WHO], 2021a).

Selain penerapan sanksi, individu terdorong untuk mempertahankan manfaat dari insentif bantuan sosial yang mungkin diterima dari program wajib vaksinasi. Pada program vaksinasi primer (dosis pertama dan kedua), sertifikat bukti vaksin merupakan bagian dari kelengkapan administratif untuk pencairan bantuan. Strategi wajib vaksinasi dengan pemberian insentif sifatnya tidak memaksa karena lebih mengarah pada “bujukan” untuk melakukan vaksinasi (Savulescu et al., 2021). Pendekatan dengan cara ini dapat memotivasi perilaku kesehatan masyarakat untuk mengikuti program wajib vaksinasi berbayar dengan ketentuan insentif yang diterima memiliki besaran harga lebih tinggi dari harga vaksin berbayar. Temuan ini sejalan dengan studi oleh Campos-Mercade et al. (2021), yang melakukan eksperimen mengenai pengaruh insentif moneter yang dapat meningkatkan tingkat vaksinasi, walaupun studi ini tidak menyarankan bahwa individu harus dibayar untuk mendapatkan vaksinasi. Belum ada studi yang secara spesifik mengukur pengaruh insentif moneter dengan kesediaan membayar vaksin. Namun, sejumlah studi terdahulu telah meneliti adanya pengaruh insentif untuk meningkatkan intensi individu mendapat vaksinasi (Cerde & García, 2021; Savulescu et al., 2021; Smith et al., 2021).

Di samping pengaruh regulasi dan hubungannya dengan pembatasan akses serta penggunaan insentif, keinginan untuk meningkatkan imun tubuh dan terhindar dari bahaya yang lebih riskan akibat paparan COVID-19 mendorong kesediaan membayar vaksin. Pengalaman langsung dan tidak langsung menjadi penyintas COVID-19 meningkatkan persepsi risiko terhadap bahaya COVID-19. Ketakutan akan infeksi dan gejala yang lebih parah meningkatkan kemungkinan individu bersedia membayar vaksin, bahkan dengan harga yang lebih tinggi (Cerde & García, 2021; Nguyen et al., 2021). Membayar vaksinasi lanjutan tidak hanya berguna untuk meningkatkan perlindungan diri dari risiko dan kerugian yang mungkin dialami apabila

to protect others around the individual, those who are more susceptible to the dangers of that virus.

In contrast to the results of the study by Harapan et al. (2020), which stated that willingness to pay was most influenced by income, this study had different results, because the willingness to pay for the vaccination was not dependent upon the monthly income of the participants. Seven participants who received incomes below IDR 1,000,000.00 (USD 66.67) per month were willing to pay between IDR 50,000.00 (USD 3.33) and IDR 500,000.00 (USD 33.34) because they felt the vaccination would be beneficial for their personal health, and that its effectiveness in giving them protection, and would endure longer and be better against COVID-19 infection. Studies by Romadhon et al. (2022) and Goruntla et al. (2021) revealed similar results, those being that the public more considered the effectiveness of the vaccine and their predisposition to risk, as opposed to income, as important factors in their willingness to pay for the vaccine.

This study also found that deterrent factors to the willingness to pay were related to the framing of the information on side-effects and the composition of the vaccine. Overblown and fear-inducing information about side-effects of the vaccine, felt to be dangerous to the body and to cause death, increased the perception that paying for the vaccine was a loss-causing exercise, was not beneficial, and posed a high risk to health. Displays of negative information influence perception, emotions, and behavior regarding willingness to accept paid-for vaccinations. The role of the media in conveying the stress-causing information that the side-effects of the vaccine were dangerous for the body perhaps did not always have a direct impact on people, but the information received did enter into their memories and influence their evaluation of the urgency to pay for the vaccine. This was in line with the findings of a study conducted by Altay and Mercier (2020) concerning the effects of framing, that small changes in the provision of information were capable of influencing the recall and attitudes of people regarding vaccination.

The misperception that the risk of vaccination was greater than its benefits will increase rejection regarding paid-for vaccination programs. Therefore, the framing of information about the side-effects and composition of the vaccine needs to be clarified by the government and the guardians of the interests (of the public) by employing scientific proof, in order to minimize misinformation.

terpapar *COVID-19*, tetapi juga merupakan suatu usaha untuk melindungi pihak lain di sekitar individu yang lebih rentan terhadap bahaya *COVID-19*.

Apabila dibandingkan dengan hasil studi oleh Harapan et al. (2020), yang menyatakan bahwa kesediaan membayar paling dipengaruhi oleh pendapatan, studi ini memiliki hasil yang berbeda karena kesediaan membayar vaksin tidak tergantung kepada pendapatan bulanan dari partisipan. Sejumlah tujuh partisipan yang memiliki penghasilan di bawah IDR 1.000.000,00 per bulan bersedia membayar vaksin dengan rentang harga IDR 50.000,00 sampai dengan IDR 500.000,00 karena merasa vaksin bermanfaat bagi kesehatan dirinya dan efektivitas vaksin akan bertahan lebih lama untuk memberikan perlindungan diri yang lebih baik terhadap infeksi *COVID-19*. Studi yang dilaksanakan oleh Romadhon et al. (2022) dan Goruntla et al. (2021) menunjukkan hasil serupa, yaitu bahwa masyarakat lebih mempertimbangkan efektivitas vaksin dan kerentanan risiko sebagai faktor yang penting dalam kesediaan membayar vaksin dibandingkan pendapatan.

Studi ini juga mengemukakan faktor penghambat kesediaan membayar terkait dengan *framing* informasi efek samping dan komposisi vaksin. Berita yang menakutkan dan berlebihan mengenai efek samping vaksin yang dirasakan membahayakan tubuh dan menjadi penyebab kematian meningkatkan persepsi bahwa membayar vaksinasi adalah tindakan merugikan, tidak bermanfaat, dan berisiko tinggi terhadap kesehatan. Paparan terhadap informasi yang negatif memengaruhi persepsi, emosi, dan perilaku untuk bersedia mendapatkan vaksinasi secara berbayar. Peran media dalam menyampaikan informasi yang menekankan bahwa efek samping vaksin berbahaya bagi tubuh mungkin tidak selalu berdampak langsung pada individu, tetapi informasi yang diterima akan masuk ke dalam memori dan memengaruhi penilaian terhadap urgensi membayar vaksin. Hal ini sejalan dengan studi yang dilakukan oleh Altay dan Mercier (2020) mengenai efek *framing*, bahwa perubahan kecil dalam penyajian informasi mampu memengaruhi ingatan dan sikap individu terhadap vaksinasi.

Kesalahan persepsi bahwa risiko vaksinasi lebih besar daripada manfaatnya akan meningkatkan penolakan terhadap program vaksinasi berbayar. Maka dari itu, *framing* informasi terhadap efek samping dan komposisi vaksin harus diterangkan oleh pemerintah dan pemangku kepentingan dengan menggunakan bukti ilmiah, agar dapat meminimalisir misinformation. Temuan

These findings were in accord with previous studies, which examined the influence of framing concerning the COVID-19 vaccine (Borah et al., 2021; Hameleers, 2021) and perceptions related to the side-effects and benefits of the vaccine (Goruntla et al., 2021; Graeber et al., 2021; Nguyen et al., 2021; Shitu et al., 2021). What still remains is the need for analysis in greater depth to look at the what is the influence of the framing of information related to the side-effects and composition concerning willingness to pay, rather than merely the intention to receive the vaccination.

A total of 78% of participants had also not been exposed to COVID-19. Direct experience of being infected with the virus might influence the willingness to pay for the vaccinations, because people with bad experiences, of having been infected would be willing to pay to obtain better protection. These results were in line with those of a previous study, that those who had previously contracted the virus were more willing to pay for vaccination, compared to those who had not yet been infected (Adigwe, 2021).

Furthermore, the perception that two doses of vaccine was sufficient to achieve physical immunity caused participants to be unwilling to pay for (booster) vaccination, especially because they had obtained the previous vaccinations for free, through the program of obligatory primary vaccination (first and second doses). This assumption has been proven scientifically to be false, because the efficacy of the vaccine declines after six months (World Health Organization [WHO], 2023). However, not only their certainty regarding when the pandemic will end, and about how many doses would be required to achieve herd immunity made people skeptical about vaccination, which is also consistent with the findings of previous studies (Wang et al., 2021). Perceptions of the need for only two vaccinations have correlations with the determinations of previous regulations for obligatory vaccination, wherein only primary vaccination was obligatory as an administrative precondition to entry into public facilities. The perception of the need for vaccination may change with discussion of the second paid-for booster program, as well as with the provision of education and the promotion of health, and about the benefits of additional vaccinations.

### Limitations and Recommendations

This study had limitations related to the interview process, which was performed prior to the regulations regarding the obligatory booster vaccination being

ini sejalan dengan studi sebelumnya yang meneliti pengaruh efek *framing* tentang vaksin COVID-19 (Borah et al., 2021; Hameleers, 2021) dan persepsi mengenai efek samping dan manfaat vaksin (Goruntla et al., 2021; Graeber et al., 2021; Nguyen et al., 2021; Shitu et al., 2021). Hanya saja, diperlukan analisis lebih jauh untuk melihat bagaimana pengaruh *framing* informasi terkait efek samping dan komposisi vaksin terhadap kesediaan membayar, tidak hanya intensi mendapatkan vaksin.

Sebanyak 78% partisipan juga belum pernah terinfeksi COVID-19. Pengalaman langsung tertular virus dapat memengaruhi kesediaan membayar vaksin karena individu yang memiliki pengalaman buruk terinfeksi COVID-19 akan bersedia membayar vaksinasi untuk mendapatkan perlindungan yang lebih baik. Hasil ini serupa dengan studi sebelumnya bahwa individu yang pernah terpapar COVID-19 lebih bersedia membayar vaksinasi dibanding individu yang belum pernah terinfeksi (Adigwe, 2021).

Lebih jauh, persepsi atas dua dosis vaksin telah cukup untuk membentuk kekebalan tubuh membuat partisipan tidak bersedia membayar vaksinasi. Apalagi karena partisipan tersebut memperoleh vaksin secara gratis melalui program wajib vaksinasi primer (dosis pertama dan kedua). Anggapan ini secara ilmiah terbukti tidak benar karena efikasi vaksin akan menurun setelah enam bulan (World Health Organization [WHO], 2023). Namun, tidak adanya kepastian kapan pandemi berakhir dan berapa dosis vaksin yang akan diperlukan untuk mencapai *herd immunity* membuat individu skeptis dengan vaksinasi, yang juga konsisten dengan temuan dari studi sebelumnya (Wang et al., 2021). Persepsi kebutuhan dua dosis vaksin berkorelasi dengan penetapan regulasi wajib vaksinasi yang sebelumnya hanya diwajibkan untuk melakukan vaksinasi primer sebagai syarat administrasi untuk mobilisasi dan memasuki fasilitas umum. Persepsi kebutuhan vaksinasi mungkin akan berubah ketika wacana program vaksinasi berbayar diterapkan untuk vaksinasi *booster* kedua, selain memberikan edukasi dan promosi kesehatan mengenai manfaat vaksinasi lanjutan.

### Keterbatasan dan Saran

Studi ini memiliki keterbatasan sehubungan dengan proses wawancara yang dilakukan sebelum aturan wajib vaksinasi *booster* diberlakukan, sehingga beberapa

enacted, so that several participants had the perception that the requirement for, and the obligatory nature of, the vaccination was limited to primary vaccinations (first and second doses). Besides this, the majority of the participants, when interviewed, had not been exposed to COVID-19, so that their perceptions of the risks of infection were low, and this fact also influenced the degree of urgency these people felt to pay for subsequent vaccinations. Although this was so, the results of this study have provided clarification as to how willing people will be to pay for the vaccinations, if the government does not again fully subsidize COVID-19 vaccination, as well as the factors which may strengthen or weaken willingness to pay. In relation to the stated limitations, the authors recommend that future studies involve a greater number of participants, with the hope of obtaining the characteristics of participant which are more uniform, and who are more up-to-date regarding the situation of vaccination regulations in Indonesia.

In relation to the qualitative nature of this study, future studies in the form of surveys and experiments are required, to determine just how greatly the influence of regulations regarding obligatory vaccination can increase willingness to pay for the vaccine. The results of this study may be a basis for guardians of public interests (including policy formulators) when they consider draft regulations related to health-related behavior, when and if vaccination becomes a paid-for matter. In the implementation of regulations, policy makers need to plan cost and payment schemes so that they are affordable to all layers of society.

## Conclusions

This study found that the primary factor influencing willingness to pay for COVID-19 vaccination were the regulations regarding their obligatory nature, as determined by the government and employer organizations. At the moment, the government of the Republic of Indonesia has made the receipt of the booster vaccination obligatory, as a precondition for mobility and being allowed to enter public spaces, such as offices, schools, shopping centers, parks, and so forth. Although several participants were worried about the side-effects and the composition of the vaccine, because of the framing of the information in circulation in the information media, it is believed the willingness to pay for the vaccine will increase when there is distribution of the fact that it has other usefulness, and is not only a preventative step in the prevention of the serious symptoms brought on by exposure to COVID-19. Realization of the health benefits

partisipan memiliki persepsi bahwa kebutuhan dan kewajiban vaksinasi sebatas vaksinasi primer (dosis pertama dan kedua). Selain itu, mayoritas partisipan saat wawancara belum pernah terpapar *COVID-19*, sehingga kemungkinan persepsi risiko terinfeksi *COVID-19* rendah ikut memengaruhi urgensi individu untuk membayar vaksinasi lanjutan. Walaupun demikian, hasil studi ini menyediakan penjelasan mengenai sejauh mana individu bersedia untuk membayar vaksin jika pemerintah tidak lagi mensubsidi penuh vaksin *COVID-19*, serta faktor yang memperkuat dan memperlemah kesediaan membayar. Sehubungan dengan keterbatasan tersebut, penulis menyarankan studi lanjutan untuk memperbanyak jumlah partisipan, dengan harapan memperoleh karakteristik partisipan yang lebih seimbang dan lebih *up-to-date* dengan kondisi peraturan vaksinasi di Indonesia.

Sehubungan dengan tipe studi ini yang bersifat kualitatif, studi lanjutan berupa survei dan eksperimen dibutuhkan untuk mengetahui seberapa jauh pengaruh regulasi wajib vaksinasi dapat meningkatkan kesediaan membayar vaksin. Hasil studi ini dapat menjadi landasan bagi pemangku kepentingan (termasuk pembuat kebijakan) dalam mempertimbangkan rancangan peraturan terkait perilaku kesehatan apabila vaksin menjadi berbayar. Dalam implementasinya, pembuat kebijakan tetap perlu merumuskan skema harga dan pembayaran vaksin agar terjangkau oleh seluruh lapisan masyarakat.

## Simpulan

Studi ini menemukan bahwa faktor utama yang memengaruhi kesediaan membayar vaksin *COVID-19* adalah regulasi wajib vaksinasi yang ditetapkan oleh pemerintah dan instansi tempat bekerja. Saat ini, pemerintah Republik Indonesia mewajibkan vaksinasi *booster* sebagai syarat mobilisasi dan memasuki tempat umum, seperti kantor, sekolah, pusat perbelanjaan, taman, dan sebagainya. Meskipun beberapa partisipan khawatir dengan efek samping dan komposisi vaksin karena *framing* berita yang beredar di media informasi, kesediaan membayar vaksin diperkirakan akan meningkat apabila dilakukan sosialisasi bahwa program vaksinasi memiliki kegunaan lain dan tidak hanya sebagai langkah preventif untuk menghindari gejala parah dari paparan *COVID-19*. Kesadaran akan manfaat vaksin untuk kesehatan tidak memberikan efek langsung karena untuk melakukan vaksinasi gratis pun perlu



of the vaccine will not have an immediate effect, because even the provision of free vaccinations needed the implementation of regulations and sanctions to motivate people. In this study, the drive factor had stronger influence in making people willing to pay for the vaccine, as compared to the negative influence of the deterrent factor, which was caused by the effects of the flare-up of misinformation in the mass media. The majority of participants stated their willingness to pay for COVID-19 vaccination, should there be no excessive side-effects, and should there be accurate information circulated relating to the vaccine.

In this study, the drive factors were found to be stronger and more prominent than the deterrent factors, particularly the factor of regulation, when the paid-for nature of the vaccination may be made obligatory by the government or employer organizations. The willingness of people to pay for COVID-19 vaccinations is greatly influenced by the framing of information, which stressed regulations, as opposed to health benefits. This indicated that the public literacy concerning health is already quite good, but will not immediately influence public willingness to accept the vaccine, if and when it becomes paid-for in the future. This later will influence the level of herd immunity and protection during the controlling of the spread of the COVID-19 virus, which has claimed the lives of thousands of people. From this, if and when the vaccine becomes paid-for in the future, the most effective strategy for making people ready to pay for the vaccine is by the determination of the regulations concerning obligatory COVID-19 vaccination.

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dibuat aturan dan sanksi yang membuat mereka termotivasi. Dalam studi ini, faktor pendorong (*drive*) memiliki pengaruh yang lebih kuat untuk membuat individu bersedia membayar vaksin dibandingkan dengan faktor penghalang (*deterrent*) yang disebabkan oleh efek maraknya infodemi di media massa. Mayoritas partisipan menyatakan kesediaannya membayar vaksinasi COVID-19 apabila tidak ada efek samping berlebihan dan informasi yang disampaikan akurat terkait vaksin.

Dalam studi ini, faktor pendorong (*drive*) lebih kuat dan menonjol dibandingkan faktor penghambat (*deterrent*), terutama faktor regulasi apabila vaksinasi berbayar diwajibkan oleh pemerintah atau instansi pemberi kerja. Kesiapan individu membayar vaksinasi COVID-19 sangat dipengaruhi oleh *framing* informasi yang menekankan pada regulasi dibandingkan manfaat kesehatan. Hal ini menunjukkan bahwa literasi masyarakat mengenai kesehatan sebetulnya sudah cukup baik, tetapi tidak serta merta memengaruhi kesiapan masyarakat mendapatkan vaksin COVID-19, apabila nantinya vaksinasi menjadi berbayar. Hal ini kemudian akan memengaruhi tingkat kekebalan dan perlindungan kelompok (*herd immunity*) dalam mengendalikan penyebaran virus COVID-19 yang telah merenggut jutaan nyawa manusia. Maka dari itu, apabila vaksin menjadi berbayar di masa depan, strategi paling efektif untuk membuat individu bersedia membayar vaksin adalah dengan penetapan regulasi wajib vaksinasi COVID-19.

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