INTELLECTUAL PROPERTY RIGHTS IN COVID-19 INNOVATION: ISSUES AND CHALLENGES

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ABSTRACT

The sudden emergence of deadly novel corona virus known as SAR-CoV-2 resulted in a Covid-19 pandemic Covid-19 that witnessed a global lockdown in almost all walks of life from business to innovation activities Countries all over the world in Asia-Pacific, ASEAN, Europe, and Africa continent are scrambling to implement numerous cross-border measures -as a first line of defense- to stop and prevent contact, spread and infection from the deadly Covid-19. Since the covid-19 pandemic declaration by the United Nations World health organization WHO countries all over the world have implemented both medical and legal protocols in response to national security, public health, and economic meltdowns. As of June 7, 2021, the pandemic coronavirus COVID-19 has infected and killed over 174.116 million people and resulted in 3.75 million and 157.157 million positive cases totally recovered from this deadly illness. This paper seeks to explore the issues, and examine the various challenges in relation to COVID-19 innovation from an intellectual property in medical perspective within the areas of best medical screening, detection, containment, and the development of new vaccines.

Keywords: Intellectual Property, COVID-19, Innovation, Medical, National Security, Legal Compliance and Regulatory.

INTRODUCTION

There is no nation or person who has escaped the Covid-19 epidemic unscathed. As of this writing, the verified death toll has surpassed three million, giving it one among the world's deadliest pandemics (Ives et al. 2021). States have committed substantial amounts in the research and development of numerous options; vaccines are seen as the most critical resource for halting the epidemic and mitigating its effects. However, with the authorization and approval of several vaccines on a global scale, grave concerns have been said that the nationalistic acquisition process is resulting in an inequitable distribution, which will exacerbate the global crisis to the disadvantage of everybody concerned of everyone, includes those nations that get an abnormally big quantity (Devi et al., 2020).

Vaccine nationalism is not a new phenomenon associated with the Covid-19 outbreak; comparable attitudes have been documented during earlier global health crises. Many have voiced concern about the uneven delivery of vaccinations during the Covid-19 epidemic, but few have taken action. Nearly 700 million doses of vaccine have been manufactured, with the majority being purchased and supplied by wealthier and vaccine-producing nations. Numerous international players have taken the initiative to design and implement strategies to address this issue, with the goal of ensuring equal access to Covid-19 medical resources. COVAX, a pillar of

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the partnership headed by the World Health Organization (WHO), specifically The Access to Covid-19 Tools (ACT) Accelerator, is the key example of worldwide collaboration during this epidemic (WHO 2021).

COVAX's first goal is to act as a support platform for researchers, makers, and developers of Covid-19 medical supplies, and to make 2 billion doses of vaccines accessible to high-risk populations and frontline healthcare professionals worldwide by the end of 2021. While this project has garnered considerable support on a worldwide scale, it is having difficulty achieving its objective (Cheng 2021). COVAX's member nations together account for the majority of vaccine dosage purchases and stockpiling worldwide, and although they agree to provide vaccine doses to the programmed and priorities securing sufficient for residential usage.

Because global demand for vaccines clearly exceeds supply, and because high-income countries (HIC) have bilateral purchase agreements with vaccine producers, they significantly improve their ability to access and utilize Covid-19 medical resources, forcing poorer nations to wait to get vaccinated. The present epidemic of Covid-19 is not unprecedented; previous global pandemics have occurred, and scientific literature indicates that they will grow more prevalent and spread more quickly, and result in higher death tolls as a result of the same processes that are causing and accelerating biodiversity loss and climate change (Li et al., 2021 a & b).

For over three decades, the argument has raged over whether and to what degree intellectual property rights (IPRs) promote innovation and life-saving medical advances or unjustly limit access to such breakthroughs. There is widespread agreement among public health experts and activists that the existing system – which enables innovative corporations to dominate research and development (R&D), production, and distribution – is inadequate and may result in excessive price when enabled by the monopolistic power afforded by patent rights. Numerous genuine ideas have been made to unravel the existing system in order to supply more affordable medical treatments while suitably rewarding (and stimulating additional) investment in innovation. This paper will discuss the intellectual perspective from a medical standpoint, the value of intellectual property in the medical field, the creation of IP as a business opportunity in the medical field, the IP issue surrounding the Covid-19 outbreak, and the debate surrounding IP in pandemic situations.

RESEARCH METHODOLOGY

The purpose of this study was to identify and synthesize of research in medical field in order to identify discrepancies in defining the use of IP and IP implication from the business and humanity perspective. The academic databases Emerald, Science Direct, and Social Science Database are used to compile pertinent content from scholarly publications.

Intellectual Property Perspectives

Intellectual property (IP) refers to mental creations such as inventions, literary and creative works, designs, and commercial symbols, names, and pictures (Mishra, 2021; Jajoria & Pandey, 2021; Kornprobst & Strobl, 2021). IP is legally protected by patents, copyright, and trademarks, which allow individuals to earn notoriety or financial gain from the inventions or creations they make (Cimil & Plotnic, 2021). By striking the appropriate balance between inventors' interests and the broader public interest, the IP system aspires to establish an environment conducive to creativity and innovation (Lazariuc & Lozovanu, 2021 and Anusreev, 2020). Intellectual property exists in the health care business because it covers big institutions

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that perform clinical trials, such as university medical facilities, as well as pharmaceutical and biotechnology companies' corporations performing drug development (Lopez et al., 2021; Lin et al., 2021; Simeon-Dubach et al., 2020; Kim et al., 2021). Additionally, it encompasses the intellectual property of smaller companies, like as medical practices that make discoveries, produce new therapeutic gadgets, or create unique processes and approaches (Lujan et al., 2021; Kim et al., 2020; Kamat & Kumari, 2021).

Patents, trademarks, copyrights, and even trade secrets may all be used to protect healthcare IP (Wang et al., 2021). A research medical school may have a patent for a novel treatment or method, while a pharmaceutical business may hold a patent for a new drug's product or formulation (Kumar, 2021; Alexander et al., 2021; Avram et al., 2020 & Nascimento Junior et al., 2020; Nzivo & Budambula, 2021). Hospitals, big ambulatory surgical centers, and even many solo medical offices may receive trademark registrations for their logos, markings, and advertising (Mouawad et al., 2021; Yang et al., 2021; Yusuf & Yajid, 2016). Additionally, healthcare practitioners and businesses may be protected by copyright for their publications, protocols, and policies and procedures (Laxmi & Inala, 2021). Under the guise of trade secrets, several governments have also extended IP protection to goods such as patient lists (Laxmi & Inala, 2021; Fadel et al., 2020; Frediansyah et al., 2021a). Other assets that are comparable to healthcare intellectual property include *"doing business as"* ("DBA") or fictitious name registrations, web domains, and even intimate information and relationships in business (Laxmi & Inala, 2021; Frediansyah et al., 2021a; Zarandi et al., 2021).

Healthcare intellectual property is critical for a variety of reasons. It may amount to investments in the millions, if not billions of dollars in research and development for many organizations, such as universities or pharmaceutical corporations (Potts et al., 2021; Rakedzon et al., 2021; Brown & Bollyky, 2021; Mercurio, 2021l Nguyen et al., 2021; Zhu et al., 2021). For smaller businesses, a trade secret may not need the same level of financial commitment, but it may very well be crucial to the business's existence (Miller, 2021). Regardless of size, it is critical to correctly manage and transmit IP. IP might be lost if it is not safeguarded correctly. For instance, if a buyer is unaware of acquired intellectual property, it will be unaware of the need to submit monthly maintenance costs and may risk having the IP cancelled (Cimil & Plotnic, 2021; Pa, 2021). On the other hand, if a buyer believes it has IP that it does not, it may unknowingly violate another entity's IP rights via usage (Cimil & Plotnic, 2021; Pa, 2021; Lencucha & Bandara, 2021; Ray & Bhattacharya, 2021). A cease-and-desist letter, coupled by a demand for unpaid royalties, is likely to follow shortly afterwards.

The most effective method of securing healthcare IP is to begin by identifying the IP (Wang et al., 2021). As indicated before, care should be made to include all intellectual property in an asset acquisition agreement (Wang et al., 2021; Saqrane et al., 2021). When purchasing stock, it is necessary to verify that the corporate body selling the shares is, in fact, the inventor or assignee of record, etc., with the authority to transfer the IP. Following that, appropriate actions should be taken to memorialize and transfer the IP through transaction contracts and any relevant assignment agreements. Simultaneously, appropriate notifications and updates should be sent to all applicable governmental institutions as necessary (Potts et al., 2021; Bown & Bollyky, 2021 and Mercurio, 2021).

Creation of IP and Business Opportunity in Medical Field

More than any other technology sector, medications and pharmaceuticals best exemplify globalization and the need of a robust intellectual property regime. Given that the cost of

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bringing a new medication to market may range between $1 billion to $10 billion, not to mention the dangers involved with the developmental stage, no corporation wants to risk its intellectual property becoming public property without acceptable rewards (Shamal, 2021). IP creation, acquisition, protection, and management must become a business activity on a par with resource and capital raising (Shamal, 2021; Sehailia & Chemat, 2021). The information revolution, which we are certain to see, will need a particular place for intellectual property and its handling throughout the decision-making process (Potts et al., 2021; Brown & Bollyky, 2021 and Mercurio, 2021 and Devi, Ariffin & Ab Yajid, 2020; Sidel, 2007; Sethuraman et al., 2021).

Medical Innovation and IP Protection

The worldwide pharmaceutical business is driven by scientific understanding rather than manufacturing expertise, and a company's success is heavily reliant on its research and development activities (Shamal, 2021). As a result, expenditures in research and development in the pharmaceutical sector are very high as a proportion of overall sales; some studies claim as much as 15% of total sales (Shamal, 2021). A critical concern in this business is how to control creative risks while pursuing a competitive edge over competing firms. There is a considerable cost associated with the risk of failure in pharmaceutical R&D, with the development of promising medications being discontinued due to their inability to fulfil demanding safety criteria, often after years of investment. It takes around 8-10 years from the day the molecule was originally synthesized to pass development barriers (Potts et al., 2021; Bown & Bollyky, 2021 and Mercurio, 2021). As product patents become the primary mechanism for safeguarding intellectual property, pharmaceutical firms will need to refocus their R&D efforts away from developing new procedures for making recognized pharmaceuticals and toward developing a new drug molecule and chemical entity (NCE) (Hole, Hole & McFalone-Shaw, 2021 and Mattar et al., 2020; Mahmoud et al., 2021; Mosolova et al., 2021).

Additionally, regulatory bodies are taking far longer to approve new drugs (Cipriani et al., 2020; Farjadian et al., 2019; Corrigan-Curay et al., 2018). As a consequence, the duration of patent protection is limited, necessitating further efforts to achieve a sufficient profit (Cipriani et al., 2020). The problem may be more serious in the case of pharmaceuticals generated by biotechnology, particularly those that include the use of genes (Cipriani et al., 2020; Farjadian et al., 2019; Corrigan-Curay et al., 2018). It is anticipated that the developed world will soon begin lobbying for increased medication protection (Annett, 2021). Additionally, many governments may conduct increasing pricing control in order to achieve public objectives (Awada et al., 2021). This would stress the need of lowering the cost of medicine research, manufacture, and marketing, while also necessitating planning for lower profit margins in order to recoup expenditures over a longer period of time (Awada et al., 2021). Thus, it is self-evident that the pharmaceutical sector must navigate several contradictory regulatory requirements. Numerous solutions for cost savings and trade advantage have emerged during the previous decade to fifteen years. Several of these include outsourcing R&D activities, developing R&D partnerships, and building strategic alliances.

IP Issue for COVID 19 Vaccine

Only months after the COVID-19 was declared a pandemic by WHO, and the organization issued a 'solidarity call to action.' pleading with the global community to pool expertise, intellectual property, and data for the greater good of mankind (Alteri et al., 2021).

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Rather than that, for-profit firms have an iron grip on patents, locking in revenues while taking government subsidies to offset research and development expenses. In 2021, Pfizer/BioNTech will earn 15-30 billion US dollars from COVID-19 vaccine sales, while Moderna and Johnson & Johnson will earn 18-20 billion US dollars and 10 billion US dollars, respectively (Jecker & Atuire, 2021). Government buyers spent billions on contracting with corporations to get raw materials, finance clinical studies, and adapt factories for pharmaceutical companies, without compelling them to share know-how or make vaccinations available to low- and middle-income countries (LMICs) (Jecker & Atuire, 2021). Governments just paid for their own position at the front of the vaccination line in the pursuit of their own self-interest. This has resulted in uneven access for wealthy and poor countries. As of June 2021, 85 percent of injections into arms were delivered in high- and upper-middle-income nations, while just 0.3 percent was provided in low-income countries (Jecker & Atuire, 2021).

Referring to this situation, there is a school of thought that vaccinations are the creation of for-profit corporations that own the fruits of their labor (Jecker & Atuire, 2021). They have a right, protected by intellectual property, to determine the price and supply of things they own. They might give free their wares or charge exorbitant prices. The law safeguards intellectual property both inside and across countries via copyright protection (for writers of creative works), patent protection (for inventors of industrial items), trademark protection (for recognized brands), and trade secret protection (Jecker & Atuire, 2021). Prior to 1995, intellectual property was protected worldwide by flexible regulations that were customized to each country's socioeconomic circumstances. For example, the Paris Convention's regulations on industrial property permitted governments to exclude whole industries and set the duration of IP protection (Jecker & Atuire, 2021).

The 1995 World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) altered the scene. It imposed tougher rules, including the protection of intellectual property rights and forcing WTO members to implement them within their own jurisdictions. Notably, the TRIPS agreement obligated governments to treat drugs as a patentable subject. TRIPS' core argument was that greater intellectual property laws were required to encourage innovation, which benefits everyone (Bannerman, 2020; Boshra et al., 2021). According to the TRIPS agreement, IP rights protection and enforcement should provide a positive contribution to the advancement of technological innovation, as well as the exchange and diffusion of technology for mutual benefit of technical knowledge producers and consumers, and in a manner that promotes economic and social welfare, as well as a balance of rights and obligations.

TRIPS' core premise is that intellectual property rights must remain in effect in practically all circumstances due to their critical role in stimulating innovation. Due to the fact that just a few manufacturers have the capability to create COVID-19 vaccines, members of the WTO who advocate for maintaining the status quo, including the Switzerland, European Union, Australia and Norway, and, assert that there is 'no concrete indication' that intellectual property rights are a 'substantial barrier' to accessing COVID-19 vaccines and that intellectual property is only one factor affecting the manufacture and distribution of the new vaccines (Shen & Alexanderson, 2021). This perspective has come under growing attack. Two opposing viewpoints have evolved. To begin, India and South Africa petitioned the World Trade Organization for a temporary waiver of intellectual property rights for medicinal items used to prevent, contain, or cure COVID-19 (Jecker & Atuire, 2021). The waiver would be applicable to all WTO members and would eliminate limits on four TRIPS provisions which is copyright and

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associated rights, industrial designs, patents, and protection of secret information (Jecker & Atuire, 2021). It would be reviewed yearly and would have a predetermined duration established by the WTO Council. The proposal's proponents believe that intellectual property rights have hampered the urgent scaling up of vaccine production' and that many nations, particularly LMICs, may encounter institutional and legal obstacles when using TRIPS flexibilities (Jecker & Atuire, 2021). To bridge the gap, WTO Director General Ngozi Okonjo-Iweala advocated a 'third method' in which they allow license manufacturing to nations to ensure enough supply while also addressing IP concerns. This strategy enables firms to maintain ownership while licensing vaccine manufacturing to other parties (Jecker & Atuire, 2021).

Ethical Arguments against Intellectual Property

Ethical arguments for temporarily suspending intellectual property rights for COVID-19 vaccinations begin by demonstrating why alternative arguments fall short. Ethical justifications for intellectual property rights include utilitarian and deontological arguments. Following that, consider positive ethical reasons for temporarily suspending IP rights, which appeal to global solidarity and business accountability. Global solidarity demonstrates how, during the COVID-19 epidemic, each nation's interests are inextricably linked to those of its neighbors (Bradlow et al., 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). Just as no one government can solve the danger to human health posed by climate change alone, no single nation can face the challenge posed by COVID-19 and future pandemics (Bradlow et al., 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). Rather than that, mankind must unite. Historically, countries have been unable to do so. The HIV/AIDS pandemic in Africa exemplifies this. Regrettably, it took about a decade for the first antiretroviral treatments to reach the African continent, despite the fact that Africa was the most severely affected area and antiretroviral drugs reduced death by 90% (Bradlow et al., 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). Although the US government was an early funder in research that resulted in the development of antiviral medications for HIV, distribution was controlled by profit-driven large pharmaceutical corporations. During the COVID-19 epidemic, the USA and other affluent countries repeated this error, sponsoring vaccine researchers without demanding technology transfers or payments to COVAX (the multilateral partnership supplying vaccines to LMICs). Ethically, the job at hand is to resolve a human-caused issue (Bradlow et al., 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021).

Utilitarian Arguments for Intellectual Property

Utilitarian arguments focus on obtaining the greatest benefit for society and argue that intellectual property laws are necessary to accomplish that aim (Bradlow et al., 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). The major justification for this assertion is the view that the profits generated by intellectual property are critical for stimulating innovation and discovery, which in turn advances society's interests. Without such rewards, discoveries would stagnate and growth would be slowed. In response, even if the ultimate translation of knowledge into commercial goods is impossible without financial incentives, how much money is required? As previously stated, Pfizer/BioNTech will earn 15–30 billion dollars from COVID-19 vaccine sales in 2021, Moderna will earn 18–20 billion dollars, and Johnson & Johnson will get ten billion dollars. Could these firms earn less while maintaining their drive to innovate? To ascertain this, it is vital to develop an evidence-based difference between profits required to

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promote innovation and profits above this level. Consider research that compared the profitability of 35 prominent pharmaceutical firms to the profits of 357 businesses included in the S&P 500 index from 2000 to 2018. It discovered that huge pharmaceutical businesses profited much more than other large corporations. This implies that restricting pharmaceutical industry earnings will not always result in a stop to innovation. If profit margins were equivalent to those of analogous major S&P 500 corporations, it appears fair to believe that innovation would be sustained (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021).

Because consequentialist reasons see IP as essentially instrumental, they are likewise susceptible to counterarguments demonstrating that the sought-after aim is not the lone or most significant end. During the COVID-19 pandemic, we believe that the primary priority should be to vaccinate the whole planet. With current intellectual property laws in place, the world has fallen well short of this aim. Present projections indicate that if current trends continue, there will be insufficient vaccinations to cover the world's population until 2023 or 2024. By restricting who may make vaccines, intellectual property regulations obstruct the objective of universal access to immunizations. According to the WHO, five big multinational businesses account for 80 percent of worldwide sales of COVID-19 vaccinations (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). Increased global manufacturing capacity would not only improve supplies, but would also lower pricing, making vaccines more accessible for LMICs. It would stabilize supplies, avoiding interruptions such to those seen when India suspended vaccine shipments in response to an increase in COVID-19 infections.

One may argue that lifting IP rights would not boost supply, given manufacturing capacity takes years to create. However, since the epidemic started, everyone has discovered that it takes much less time. Repurposing facilities and certifying them for safety and quality may often be accomplished in six to seven months, about half the time previously estimated. Given that COVID-19 will not be humanity's last pandemic, boosting manufacturing capacity is also important for future pandemics.

Deontological Arguments for Intellectual Property

Deontological arguments for keeping intellectual property protection assert that patent holders are the legitimate proprietors of their ideas and so entitled to current protections. With regards to COVID-19 vaccinations, the idea is that pharmaceutical corporations own these vaccines, which are the result of their labor; no one can remove what is legitimately theirs. In response, the public has made significant investments, and these items are also theirs (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). Even if for-profit corporations do the translational portion of product development, this would be unachievable without massive upstream public investment. A 2021 evaluation of published research on the technologies employed in prospective COVID-19 vaccines indicated that these technologies were predominantly financed by the public sector, namely governments (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021).

Apart from government contributions to the development of COVID-19 vaccines, there are many, but critical, contributions from those who stand on the shoulders of vaccine developers. Additionally, the physician expressed gratitude to those who volunteered for and conducted Pfizer's trials, approved the vaccine, manufactured it, manufactured the equipment used by producers (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). In conclusion, the deontological assertion that pharmaceutical firms own

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100% of COVID-19 vaccinations fails to hold up under investigation. Their ownership is limited to the added value their actions generate (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021; Chen, 2021).

Corporate Social Responsibility Perspective

According to the principles of corporate social responsibility, emphasizes the expectations for and advantages of for-profit corporations engaging in socially responsible behavior. Companies are more cognizant of the possible influence of socially responsible behaviors on competitive advantage, reputation, employee and customer retention, staff morale, and relationships with stakeholders (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021; Al-Jubari et al., 2019; Talib et al., 2020). Pharmaceutical businesses benefit from intellectual property rights because they enable them to monopolies markets and earn above-average profits. Social responsibility is critical during a pandemic because it is temporarily capping earnings and demanding businesses to contribute back, rather than allowing above average profits to grow uncontrolled. More Over, according to Locke, who coined the modern concept of property rights, believed that constitutional rights such as property could be justified overridden in certain circumstances, specifically when the merchandise is perishable and would otherwise go to waste, or when their extraction would impinge on the common good, in which case they would be limited to what leaves enough for others (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021; Al-Jubari et al., 2019; Talib et al., 2020).

Based on previous study, that manifestations of social responsibility exist on a progression, during the COVID-19 pandemic, a high level of responsibility would be demonstrated by temporarily sharing patents for products aimed at preventing, containing, or treating COVID-19, as proposed by India and South Africa; a moderate level of responsibility would be demonstrated by temporarily sharing licenses to manufacture COVID-19 vaccines, as proposed by the WTO Director General; and a low level of responsibility would be demonstrated by sending vaccines directly to nations in response to pleas for assistance (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021).

Social Responsibility from IP Perspective

The unusual conditions surrounding a worldwide pandemic need a higher level of social duty than minimum or even moderate social responsibility (Ali & Ghani, 2019; Agrawal et al., 2021; Ghani & Zakaria, 2021; George et al., 2021; Garnaut, 2021). Everyone in a position to assist must demonstrate the level of social responsibility that the occasion requires. Governments, particularly those in affluent countries, should resist pharmaceutical firms' influence peddling and take action, starting with WTO members voting for a temporary relaxation of IP rights for COVID-19 vaccinations (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021). One may argue against the plan that a temporary waiver is insufficient. COVID-19 vaccine manufacturing involves technical expertise, technology, raw ingredients, and equipment that many LMICs lack. For example, Pfizer reports that their vaccine needs 280 components from 86 vendors in 19 countries, in addition to specialized equipment and trained employees (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021; Al-Jubari et al., 2019; Talib et al., 2020; Huang et al., 2020; Hossain et al., 2021).

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As a reaction, it is acknowledged that temporarily suspending the ability of corporations to manufacture vaccines is insufficient. However, it may assist in breaking the logjam by establishing an environment conducive to investment by removing the prospect of being sued or punished. Expedient investment strategies should prioritize the development and repurposing of existing capacities that some middle-income countries already manufacture COVID-19 vaccines, and some manufacturers in LMICs are already capable of manufacturing viral vector vaccines, such as those manufactured by AstraZeneca, and contributing to the fill-and-finish stage of vaccine production (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 2021; Al-Jubari et al., 2019; Talib et al., 2020; Jamir et al., 2021). A proponent of intellectual property rights may argue that TRIPS already provides enough built-in exclusion. Article 31 empowers governments to award licenses for the use of a patent throughout the patent period without the approval of the patent holder. Between 2001 and 2016, this exemption was used 144 times to provide flexibility to 89 nations. It was expanded in 2017 to enable approved nations to export items to countries with insufficient manufacturing capacity.

Article 31 will not go us very far in response. While this is advantageous for some purposes, it is inconvenient. For pharmaceutical products, for example, exporting countries must demonstrate that the products are bound exclusively for destination countries, are easily identifiable by variations in color or shape, and contain only the product necessary to meet the requirements of an eligible country; importing countries must notify the TRIPS council of receipt (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 202; Al-Jubari et al., 2019; Talib et al., 2020). Meeting these conditions will unnecessarily postpone the critical work of global vaccination. Finally, detractors may appeal to Moderna, which voluntarily agreed not to pursue its patents during the epidemic (in October 2020). Given that no firms have queued up to manufacture Moderna's vaccine and this demonstrate the inadequacy of interim waivers (Bradlow, Qobo & Sidiropoulos, 2021; Jecker & Atuire, 2021; Sidiropoulos, 2021 and Chen, 202; Al-Jubari et al., 2019; Talib et al., 2020; Van Hecke et al., 2021). In response, a single company's vow is a start, but inadequate to catalyze the necessary worldwide reforms.

CONCLUSION

IP protection is guarantee by TRIPS Agreement and National IP laws. Easing the hold of intellectual property rights completely is not a panacea to a safer society from IP perspective. The promotion and protection of IP intellectual property rights for COVID-19 vaccines and related innovation remain critical. A temporary waiver of intellectual property protections maybe given subject to special consideration as provided for under TRIPS Agreement and National IP laws. There is a need for a holistic balance in promoting IP rights for Covid-19 innovation and ethical and social rights on the other hand. To deny IP rights entirely will not promote creation of new medical innovation and business growth.

ACKNOWLEDGEMENTS

The authors would like to acknowledge Management & Science University for the support on this publication.

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Received: 05-Jan-2022, Manuscript No. ASMJ-22-10760; **Editor assigned:** 07-Jan-2022, PreQC No. ASMJ-22-10760(PQ); **Reviewed:** 14-Jan-2022, QC No. ASMJ-22-10760; **Revised:** 20-Jan-2022, Manuscript No. ASMJ-22-10760(R); **Published:** 27-Jan-2022

Citation Information: Phuoc, J.C., Ahmad, A., Norhidayah, A., & Othman, Z. (2022). Intellectual property rights in covid-19 innovation: Issues and challenges. *Academy of Strategic Management Journal, 21*(S3), 1-13.