

# Emerging challenges to prisoners vaccination of covid-19: Historical, legal and humanitarian view

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## Abstract

This research aims to present a legal history of the prisoners' treatment in global crises along with presenting an overview of prisoners' treatment during Covid-19 in view of International Humanitarian Laws. Using the formative research method with a conceptual approach and statute approach, data was gathered from various legal documents related to prisoners' health laws linked to legal purpose theories. This study further explains the need to treat old age prisoners on a priority basis and to what extent international health organizations are making efforts to establish criteria to vaccinate this societal segment. The international regulatory framework was deeply analyzed to draw conclusions and recommendations along with WHO efforts. It was revealed that there exist adequate laws regarding priority health treatment of the prisoners in crises times but existed an enormous need to highlight and address the sensitive humanitarian issue. Additionally, WHO and other international organizations have also revised the international laws during Covid-19 to treat the prisoners. However, there is an immense need to devise explicit regulations regarding the accessibility of the vaccine to all the groups of society, including prisoners. The provision of a detailed overview of international laws and treaties regarding prisoners' priority health treatment is a major advance of this research. Further recommendations for the developed and developing nations and future research directions are suggested.

## Keywords

Prisoners health treatment, international laws and regulations, old age prisoners, vaccine priorities, Covid-19

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## Introduction

The COVID-19 pandemic is one of the most significant public health challenges of this era. During this critical time, a segment of society that is ignored for some reason is almost 10 million prisoners all over the world. Scholars reported that prisoners represent a higher prevalence of psychiatric and physical vulnerability and mobility due to acute consequences such as premature death and suicide, etc.<sup>1–3</sup> Simultaneously, the virus spread brings a unique infection control challenge to closed communities like prisons that are closed and overcrowded in developing and developed nations.<sup>4</sup> Whereas despite restrictions in Liberty, it is a right of the prisoners to access medical care.<sup>1</sup> This is preserved in guidelines from different humanitarian laws and also from the United Nations through the “Mandela rules.”<sup>5</sup>

Various stressors like anxiety and psychological distress are associated with measures such as quarantine that

seek to control the COVID-19 spread.<sup>6</sup> And these stressors emerge in high intensity in the prisoners as they already feel a sense of powerlessness and loss of Liberty during imprisonment, whereas the preventive measures that apply the restrictions in prison visiting arrangements can further make them feel isolated.<sup>7</sup> In connection to that, various events are reported during the COVID-19 in prisons; for example, in an Italian prison, 12 prisoners died because of restrictions during the pandemic.<sup>8</sup> According to the Guardian 2020, on March 26, 2020, the first death related

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to COVID-19 was reported in prison in the United Kingdom, whereas by April 28, 2020, almost 2000 possible cases were witnessed in the UK, with 15 reported deaths in prisons.<sup>9</sup> Moreover, prison-based outbreaks of the virus in China have been reported, with over 500 cases.<sup>4</sup> Likewise, according to BBC News 2020, in the USA, 1300 cases and 30 deaths were reported during that time, along with the death of a prisoner giving birth.

In recent times, a tremendous increase in the number of old adult prisoners in developed countries has been witnessed, that is, in England and Wales, 17 people of the prisoners R aged 50 years or older (13,890). This includes three 970 prisoners above age 60, which are three times more than the prisoners of age 15 years old.<sup>10</sup> Moreover, old age people in prison face multiple health problems based on complex health needs than the younger community in prison.<sup>1</sup> Besides, 85% to 93% of old-age prisoners have been estimated to suffer from the form of physical illness.<sup>10</sup>

The prisoners should not be forgotten in the public health response to the COVID-19 as they are also a significant part of the community.<sup>11</sup> *All the established principles like early identification of cases, social distancing, and isolation of the most vulnerable person must be applied in the prisons. Those who become infected must be treated similarly to normal people outside the prisons.*<sup>12</sup> Moreover, the emergence of covid-19 has again raised the issue of prisons as incubators of infectious diseases, highlighting that “prison health is public health.” There have been various pandemics/infectious diseases in the past, which affected the prisoners in different countries.<sup>13</sup> In response to those infectious diseases, WHO and other world organizations took measures to ensure the prisoners’ health and welfare, which has been highlighted as the main focal point of the current study to further explain the international measures taken by different international authorities during Covid-19.

World Health Organization’s guidelines while responding to the virus in prisons demonstrate that health and custodial agencies jointly engage in prevention and control treatment, information sharing, and risk management in prisons.<sup>14</sup> Besides dropping the COVID-19 outbreak in prison and protecting the prisoners and staff, many immediate actions are required at the international level.<sup>15,16</sup> This is immensely important for the overcrowded prisons, as it has been reported by Kumar et al.<sup>17</sup> that prisons in about 59% of all nations in the world are over-occupied from the reported capacity due to which prisoners are facing adverse health problems.

Moreover, there is a dire need to devise special measures at the international level for the old age prisoners,<sup>18</sup> as studies reported that due to long-term and chronic disease, the aging process of the prisoners is faster than their associates on the outside of the prison.<sup>19</sup> Thus, the current study highlighted the need for old-age prisons priority

treatment based on multiple reasons. In global health justice and equity, the law can serve as both a barrier and an enabler.<sup>20</sup> Besides, during the COVID-19 pandemic, the law has been used as a system to make sure that preventive measures are taken to curb the spread of the virus.<sup>15,21</sup> In light of that, international lawmakers should accelerate their efforts to manufacture a vaccine to cure the deadly virus.

Moreover, there are studies available in different contextual settings that explains the importance of health laws and regulations, but as per the authors’ knowledge, there is a dearth of literature regarding the presentation of a consolidated overview of the prisoner’s treatment in global crises, including Covid-19 and the international humanitarian laws available regarding treatment of prisoners during such crises along with presenting an overview of the efforts exerted by the international organizations for vaccination. Thus, it is a hot humanitarian issue at the moment to be highlighted at this point in time. To bridge this gap and to contribute to the literature on Covid-19 regulatory requirements, the current study aims at achieving the following objectives;

- To present a legal history of the prisoners’ treatment in global Crises
- To present an overview of the Covid-19 and Prisoners
- To review the prisoners’ health treatment and International Humanitarian Laws
- To explain why prisoners need priority treatment for vaccination.
- To have an overview of the Health Laws/trends and regulatory requirements related to vaccination priorities.
- Recommendations for lawmakers in developing and developed countries.

## Methodology

The research approach used is a normative juridical approach with literature research examining the secondary data.<sup>22</sup> The Specification of the study is analytical descriptive, the method used to describe an ongoing condition or conditions whose purpose is to provide data about the research’s object to explore and analyze the ideal constructs based on legislation.<sup>23</sup> The data collection technique used by the authors in this research was the document study technique, which is a technique that studies various documents, especially legal documents related to health laws, specifically health laws and regulations associated with prisoners. This study uses secondary data from various books, journals, regulatory magazines, institutional reports, research, and the internet. Moreover, the study used analytical and statistical material from the World Health

Organization (a United Nations specialized agency responsible for international public health) website. The WHO Constitution establishes the agency's principles and governing structure, stating its main objective as "the attainment by all peoples of the highest possible level of health."<sup>24</sup>

Furthermore, an attempt was made to identify the laws and regulations of prisoners and amendments to those laws during Covid-19. The analysis methods and synthesis highlighted the international laws and treaties available regarding prisoners worldwide and how international law-making agencies are actively participating in advancing these laws according to the circumstances and requirements of the citizens in Covid-19 times. Moreover, this research also used a systematic literature search methodology to collect relevant secondary data from the most popular database Scopus. The key words search was employed on the database using the most popular keywords such as "Pandemic 2019," "COVID-19," "World health laws," "World health laws regarding prisoners," "prisoner's health security during Covid-19," "Old age prisoner's health laws and regulations," "Covid-19 vaccination" etc. The timeline was selected from December 2019 to February 2021. This way, researchers were able to extract the quality information to compile it in a single comprehensive study. Furthermore, the authors' attempted to identify and address gaps in the literature and presented a consolidated review of the topic based on a current real-world issue.

## Results

### *Legal history of prisoners' treatment in global crises*

World Health Organization defines health as a "state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity."<sup>14</sup> Moore and Eikenberry<sup>25</sup> reported the negative impacts of Solitary imprisonment on individuals' health. The negative impact of various diseases on the prisoners' mental, physical, and social health has been reported by researchers and practitioners in history.<sup>26</sup> Yet solitary imprisonment is the universal and common characteristic of the worldwide prison system used in different criminal justice processes for multiple reasons, that is, containment protection and indulged punishment, etc.<sup>27</sup> There is a long history of the outburst of different diseases at different times, which required a comprehensive approach, including protecting staff and prisoners, since transmission can occur in prisons. A few examples of the treatment of the prisoners include the following cases as an example.

- In 2009, the mini influenza epidemic was a big threat in the Belgian prison system, as no vaccine was available.<sup>28</sup> The WHO director-general, On April 25, 2009, called for an emergency committee and avowed a "public health emergency of international

concern" as a first time reported declaration as per the new regulations defining the public health emergency as an exceptional case that can spread the virus to the other nations; thus requiring international coordination to curb the virus.<sup>29</sup> The WHO also played a vital role in providing necessary treatment and resources to the citizens and the prisoners at a significant level.<sup>30</sup>

- On October 13, 2010, "the Global Plan to Stop TB 2011–2015" was introduced by the "Stop TB Partnership," being a coalition of more than a 1000 organizations all over the globe to control the TB prevalence rate and mortality as compared to 1990 reported cases.<sup>31</sup> It was further aimed at diagnosing all TB cases, especially in more vulnerable communities like prisons.<sup>32</sup>
- In 2013, a policy brief on a thorough retort to HIV in prisons was issued by UNODC, in collaboration with the International Labor Organization, the Joint United National Program on HIV/AIDS (UNAIDS, WHO, and the United Nations Development Program.<sup>33</sup> This comprised of a wide-ranging collection of intercessions, mostly concerning to help Department under HIV counseling and testing, treatment, support and care along with diagnosis, prevention, and treatment of TB.<sup>33</sup>
- In August 2014, WHO declared public health emergency of international concern for the outbreak of Ebola virus disease in West Africa. This virus started to spread in Libere, Geneva, Sierra Leone etc. And was thought to be one of the largest viruses in the world's history.<sup>34</sup> During that pandemic time, which ensured the prisoners' health safety.<sup>34</sup> Special doctors were appointed to deal with the prisoners to provide timely treatment, and prisoners were properly guided and trained about the precautionary measures.<sup>31</sup>
- Furthermore, on February 1, 2016, Public Health Emergency was declared by WHO associated with the Zika virus.<sup>35</sup> During that, the WHO also took special measures to spread awareness among prisoners and provided them with special health care facilities.<sup>36</sup>
- Another Ebola outbreak, beginning in August 2018 in the "Democratic Republic of Congo (DRC)" was just a short of a perfect storm. In connection that, in March 2019, the president of DRC released over 700 political prisoners, an important gesture in the care of prisoners<sup>37</sup>; likewise, WHO stepped forward to implement special measures to provide health security to the prisoners.<sup>38</sup>

### *Covid-19 and prisoners*

In the beginning, a 15-member International Health Regulations Emergency Committee (EC) was organized

by the WHO to confer about the declaration of a Public Health Emergency of International Concern (PHEIC) after the outbreak of COVID-19.<sup>39</sup> As a result of the mutual decision and deadly spread of the virus on January 31, 2020, “WHO declared the COVID-19 outbreak a PHEIC as stipulated by Article 12 of the IHR.”<sup>14</sup>

Moreover, various policies have been devised by the WHO and other renowned world organizations regarding prisoners based on the fact that prison conditions can affect the preventative measures regarding COVID-19 all around the world, and the additional risks that are associated with prisoner’s health to irradicate the virus, which include<sup>40</sup>;

- ***The Committee on Economic, Social, and Cultural Rights (CESCR)***: Paragraph 47 of CESCR is related to maximum utilization of the technological resources to deal with the uncertain situations faced by different nations, particularly for the benefit of the disadvantaged group of society like prisons. This can be applicable for COVID-19 tests, treatments, and eventually, vaccines that are available to prisoners. In April 2020, the CESCR also highlighted that “if a pandemic develops, sharing the best scientific knowledge and its applications, especially in the medical field, becomes crucial to mitigate the impact of the disease and expedite the discovery of effective treatments and vaccines.”<sup>40</sup>
- ***The World Health Organization’s (WHO)*** guidance note Preparedness, prevention, and control of COVID-19 in prisons and other places of detention stated that “for risk assessment, screening should be done at the point of entry in prisons and that health care and public health teams should undertake a risk assessment of all people entering the prison. Visits should be restricted to necessary personnel, and health officials and a detailed registry should be available of people visiting prison.”<sup>26</sup> Those prisoners who got infected with the virus must be provided with the opportunity of the current time and, after recovering from the deadly virus, should be given priority care in the prisons.<sup>12</sup> Besides, the prison staff must attend the training sessions about dealing with the prisoners who got infected with the COVID-19. Moreover, it was suggested that food could be delivered inside the cells with unlimited access to the open air while restricting a large number of prisoners from meeting together at one point in time.<sup>41</sup>
- ***“The Subcommittee on Prevention of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment,”*** in their guidance titled “Prevention of Torture to State Charities and National Preventive Mechanisms,” clearly advise the nations to identify the infected prisoners as a priority and make it

possible to keep them in separate places to further stop the spread of the virus among others with good health.<sup>42</sup>

- Moreover, through ***Sustainable Development Goals (SDGs)***, many nations prioritize health and work in conjunction with each other against deadly diseases. Thus 13 out of 17 SDGs broadly address health issues all over the globe. During crises, nations are meant to work in a coalition on the SDGs based on the fact to “reduce by one-third premature mortality from non-communicable diseases through prevention and treatment” by 2030. In line with a right to health framework, SDGs also highlight the importance of “access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all.”<sup>43</sup>
- ***“The International Committee of the Red Cross (ICRC)*** is concerned with the welfare of anyone detained in connection with armed conflicts or internal disturbances that require intervention by a neutral organization. Its objective is to ensure acceptable detention conditions and safeguard the physical and mental welfare of prisoners”.<sup>44</sup>

### ***Prisoners’ health treatment and international humanitarian laws***

All the persons who are deprived of the Liberty hold specific rights related to health and other standards of living with a broader range of international instruments, including human rights treaties at the international and regional levels, “United Nations resolutions and Agreed Model Standards And Guidelines” for the treatment of prisoners adopted by the UN General Assembly etc.<sup>14</sup> In some cases, these instruments articulate specific rights and standards, while others are more general. International humanitarian law seeks to regulate and sustain the prisoner’s welfare to protect individuals detained because of arms conflicts or civil issues.<sup>4</sup> Moreover, international treaties ensure prisoners’ physical, mental and environmental health based on curative, palliative, and preventative health care.<sup>45</sup> Some of the specific humanitarian laws regarding the health treatment of the prisoners are as follows;

- ***“The Universal Declaration of Human Rights (UDHR)*** clearly states in Article 25.1 that everyone has the right to a standard of living adequate for their health and wellbeing, including medical care”.<sup>46</sup>
- ***“The International Covenant on Economic, Social and Cultural Rights (ICESCR)”*** stipulates the obligation under Article 12 “to respect, protect and fulfill the right of everyone to the enjoyment of the

highest attainable standard of physical and mental health, including those who are imprisoned or detained.”<sup>47</sup>

- **“The Committee on Economic, Social and Cultural Rights (CESCR),”** which is the body tasked with monitoring compliance with the Covenant, has explained that “States are under the obligation to *respect* the right to health by, *inter alia*, refraining from denying or limiting equal access for all persons, including prisoners or detainees. . . to preventive, curative and palliative health services; abstaining from enforcing discriminatory practices as a State policy.” Article 12.2 (c) also underscores the prisoner’s right to control, prevention and treatment of diseases. It requires the “establishment of prevention and education programs for behavior-related health. . . and the promotion of social determinants of good health, such as environmental safety, education, economic development and gender equity.”
- **“The International Covenant on Civil and Political Rights (ICCPR),”** “Article 10, states that all persons deprived of their liberty shall be treated with humanity and with respect. Thus, Prisoners should enjoy the same standards of health being provided to the general public, and if those cannot be provided for in detention centers, alternative mechanisms should be set up by the state.”<sup>48</sup>
- **“The United Nations Standard Minimum Rules for the Treatment of Prisoners”** (known as the “Nelson Mandela Rules”) demonstrate that it is the responsibility of the state to take care of the hands of the prisoners. The prisoners should be available with all the health care facilities just like the normal people outside the prison with free-of-charge services.<sup>49</sup> Prisons should also have in place “a health-care service tasked with evaluating, promoting, protecting and improving prisoners’ physical and mental health, paying particular attention to prisoners with special healthcare needs or with health issues that hamper their rehabilitation.”<sup>49</sup>
- **“The Office of the United Nations High Commissioner for Human Rights (OHCHR)”** has specifically warned states against the dangers of overcrowding. In the 2017 guideline’s on “*Non-discrimination and the protection of persons with increased vulnerability in the administration of justice, in particular in situations of deprivation of liberty and concerning the causes and effects of over-incarceration and overcrowding,*” the OHCHR recommends that states are fully cognizant of the increased risks for prisoners due to overcrowding.<sup>50</sup>
- **The World Health Organization (WHO).** The contemporary concept of the right to “the highest attainable standard of health is drawn from the World Health Organization’s Constitution in 1946,48” language that has since formed the basis for subsequent international instruments that enshrine the right to health.<sup>14</sup> According to the Preamble of the WHO Constitution, “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.”<sup>51</sup> As such, the WHO defines the right to health as universal and therefore entitled to all persons, whether inside or outside of prison. In recent years, the WHO has explicitly applied this universal right to health as the basis for developing prison health guidelines. “Article 2 of the WHO Constitution details over 20 areas of necessary action in order to achieve the objective of enabling all persons to attain the highest possible standard of health.”<sup>51</sup> This broad and universal concept of health is of particular resonance in examining prisons’ issues and ensuring that prisoners are entitled to adequate medical standards.
- **The International Committee of the Red Cross (ICRC)** has also defined laws and regulations to work for the prisoners’ welfare in connection with armed conflicts or internal disturbances that require intervention by a neutral organization. First, Rule 110 provides that the sick “must receive, to the fullest extent practicable and with the least possible delay, the medical care and attention required by their condition.” Second, Rule 118 stipulates that “persons deprived of their liberty must be provided with adequate food, water, clothing, shelter and medical attention.” Third, Rule 121 provides that “persons deprived of their liberty must be held in premises . . . which safeguard their health and hygiene.” The Red Cross notes concerning Rule 121 that “Additional Protocol II requires that detainees be held in healthy and hygienic conditions” and that “poor conditions of detention may amount to inhuman treatment.”
- **Geneva Conventions are found in Convention (III)** relative to the Treatment of Prisoners of War. “Article 13 specifies that Prisoners of war must, at all times, be humanely treated. Any unlawful act or omission by the Detaining Power, causing death or seriously endangering the health of a prisoner of war in its custody, is prohibited and will be regarded as a serious breach of the present Convention.”<sup>52</sup> Before Geneva III, all the health-related matters, including Melton, the physical and environmental health of the prisoners, were treated as per the “1929 Geneva Convention relative to the Treatment of Prisoners of War.”

## Discussion

### *Prisoners need priority health treatment*

Older prisoners range from 45 to 65 years and over; however, there has been some agreement about classifying older prisoners as 50 years and over<sup>53</sup> because the aging process in the prisons is more accelerated based on the biological susceptibility of the prisoners during imprisonment.<sup>54</sup> Therefore the early onset of chronic health problems and geriatric syndromes, such as incontinence, hearing and visual impairment, and risk of falls, can arise in old age prisoners.<sup>55</sup> Furthermore, Lahav et al.<sup>56</sup> reported that up to 40%–50% of older prisoners experience mental health problems, with a high of anxiety and depression. On the whole, these aging issues may result in a poor immune system of the prisoners leading to a wide range of social and health problems,<sup>57</sup> thus creating an important question of how to take care of the old age prisoners?

Besides, research reports that individuals in prison require special health and social care as prisons are not well equipped to manage all the needs of the prisoners.<sup>58</sup> Moreover, research demonstrates that old age prisoners are more vulnerable to father stress and anxiety based on the age factor and a sense of loneliness inside the prison.<sup>59</sup> Therefore “the Department of Health” advises that it is important to access the social care and health need of old age prisoners while entry into the prison.<sup>56</sup> It is also imperative that those health care needs are satisfactorily met inside the prison, especially for old-age prisoners.<sup>60</sup> The health and social care needs of older prisoners must be satisfactorily met to make them physically and mentally strong.<sup>60</sup> Moreover, “the Disability Discrimination Act, Equality Act, and article 8 of the European Convention on Human Rights” also support the priority treatment of old age prisoners based on their age and health requirements.<sup>61</sup> Besides, most prisoners are released in their lifetimes at a certain age; therefore, adequately meeting older prisoners’ needs could lead to preventive strategies that reduce costs when prisoners are released and reduce the likelihood of reoffending after release.<sup>59</sup> Thus, the failure to meet older adults’ health and social care needs can be damaging to society.

Moreover, there are very limited studies internationally investigating the use of older adults’ health and social care assessments in prison. “The Older prisoner Health and Social Care Assessment and Plan (OHSCAP)” was developed via “action learning.”<sup>62</sup> It is a structured approach to identifying and addressing older prisoners’ health and social care needs. The current study aimed to present an overview of the importance of the priority treatment of the old age prisoners in health matters while specifically explaining the older age prisoners’ health and social care needs and the availability of international laws.

### *World health laws/trends related to vaccination priorities*

On February 3, 2020, the “Strategic Preparedness and Response Plan” was proposed by WHO for the COVID-19, which includes accelerating the research and development for vaccination. Later, the “Global Research and Innovation Forum” was held by WHO on February 11–12, 2020, to devise a research road map for the vaccination of COVID-19. The fact that a COVID-19 R&D forum was the first meeting convened after the PHEIC declaration testifies to the importance of R&D in response to Emerging Infectious diseases EID. Different nations started to actively prepare a vaccine to cure the deadly virus.<sup>63</sup>

In this forum, experts from the WHO R&D Blueprint, including members of the Global major global funders, Research Collaboration for Infectious Disease Preparedness, were present.<sup>64</sup> During the meeting, the forum members prioritized eight immediate research work areas based on the short term, midterm, and long term priorities in multiple areas, including; clinical management, epidemiology, infectious control, therapeutics diagnostics, and development of vaccination.<sup>64</sup> Moreover, an expert external panel governed by The WHO, known as the “Strategic Advisory Group of Experts on Immunization (SAGE),” started working in parallel to check the findings of clinical trials along with other evidence is on the disease based on Dr respecters for disease age group affected and programmatic use, etc. After a complete inspection and confidence in the vaccine, it will be recommended by the SAGE when and how it should be used.<sup>18</sup>

Along with the preparation of the vaccination, another important concern is about the equitable distribution of the vaccine on a fair and equal basis. In this context, various nations are executing Advance Purchase Agreements (APAs).<sup>65</sup> “APAs are legally binding contracts whereby one party, such as a government, commits to purchasing from a vaccine manufacturer a specific number or percentage of doses of a potential vaccine at a negotiated price if it is developed, licensed, and proceeds to manufacture.”<sup>65</sup> Simultaneously, manufacturing capacity is fulfilled first by wealthy countries’ orders.<sup>66</sup> The same happened during the times of influenza in 2009. An H1N1 pandemic when several APAs held by “high-income countries (HICs)” we consider to be the source of priority access to the vaccine making the availability more difficult for the developing nations.<sup>67</sup> undo APS are not always legal tools but are used by the global health organizations to ensure that the lower and middle-income countries may have access to the vaccination as part of an “Advance Market Commitment (AMC).”<sup>68</sup>

Although WHO defines some rules and regulations regarding the COVID-19 products’ distribution criteria all over the globe, but still, the legal process and framework

have not been publicly proposed and revealed on an international basis.<sup>14</sup> Despite the lack of a specific international agreement for COVID-19 vaccines, 171 countries already have legally binding obligations under the “International Covenant on Economic, Social, and Cultural Rights (1966)” to internationally come forward and play their part so that the people of all regions may enjoy the benefits of technology and scientific research and its uses without any discrimination.<sup>27</sup> Moreover, protecting, respecting, and fulfilling all these international rights during the hard times of COVID-19 will further ensure that COVID-19 vaccines are assessable, acceptable, and available to all the countries with good quality.<sup>65</sup>

Moreover, although on February 17, 2021, the Secretary-General of the World Health organization called vaccine equity the biggest moral test for the global community, the security council considers equitable availability of doses. However, as depicted from the above literature and arguments that there are no defined rules and regulations for the distribution of the vaccine yet, likewise, the laws and regulations for providing the vaccine for prisoners have not been specified by the law-making agencies as things are ambiguous and uncertain. Thus, the current study made an advance by highlighting the most sensitive issue of equitable access to the vaccine to underprivileged prisoners based on humanistic grounds.

## Recommendations

Based on the above discussion following recommendations are presented for the developed and developing nations regarding the treatment of prisoners during pandemic times, including old prisoners and the provision of vaccination.

- There is a need to introduce the majors to reduce the prisons’ population based on the alternative criminal justice disposals; also, an early release of low-risk offenders can be initiated.<sup>69</sup>
- Non-shared accommodations should be provided to the prisoners with the facility of single-cell accommodation where possible during the pandemic.
- Those who are entering the presence during the pandemic must be screened properly for the COVID-19 and, if found positive, must be kept in isolation. Also, individuals who are found to be Covid positive during imprisonment should be isolated from others to reduce the virus’s spread. For this purpose, a robust and systematic screening process of new prisoners on reception must be done and keep a track record of the travel history and symptoms of COVID-19. Moreover, in prisons, high hygiene, sanitation, and access to potable water must be maintained.
- For treatment and transfer of the suspected or confirmed COVID-19 positive prisoners, the prisons must make local arrangements with the designated hospitals on time on a priority basis.
- Along with the COVID-19 positive cases, the prison management needs to take care of the mental and physical health of non-COVID-19 positive prisoners to avoid adverse conditions in prisons.
- Prison management should also make it possible to brief the prisoners regarding precautionary measures related to COVID-19 to make them psychologically and mentally strong while briefing about keeping themselves safe while falling the SOPs.<sup>41</sup>
- Being a vulnerable population, prisoners should be provided with novel treatment and vaccines as soon as they get available
- It is also important that those health care staff deployed in the prisons should not serve outside the prisons during the crisis. However, such decisions are taken by the higher authorities based on who needs the priority treatments, but as the prison is a separate world, SOPs should be followed. Moreover, the psychiatrist and mental treatment health care workers should be diploid in the prisons based on the prisoners’ need<sup>70</sup> to help them fight against the pandemic.
- There is also a dire need to increase the prisons to improve the health care standards equivalent to the outside community. Moreover, the scope, quantity, and targeting services should be enhanced along with treating the old age prisoners on priority by identifying and suitably maintaining their social and healthcare needs.<sup>59</sup>
- From the social perspective, efforts should be made by allowing older prisoners to meet with their peer prisoners following the full SOPs to morally motivate them to fight the pandemic and other health-related issues.
- Any international governance platform for COVID-19 vaccines, including the “COVAX Facility or a New Mechanism,” will be successful based on the global excess, commitment, and momentum to the COVID-19 vaccine, particularly from HICs. Moreover, along with meeting citizens’ needs for vaccination on an equitable basis, there must be defined rules and regulations to meet the prisoners’ vaccine requirements.
- Furthermore, there is a need to devise an international COVID-19 vaccine allocation framework being a non-binding resolution based on the established governance principles, ensuring transparency, accountability, participation, etc. For this, decision-makers must ensure the equitable distribution within and, importantly, between countries and all social groups.

## Significance of the study to the public health

In recent times, a lot of research has been conducted to highlight the challenges posed to public health by the Covid-19 Phenomenon. However, the historical laws and regulations related to social justice and equal treatment for prisoners in times of crisis have been slightly ignored. This resulted in putting the lives of prisoners at risk while ignoring their human rights to prioritize treatment as the underprivileged class of society. This research has a significant impact on prisoners' public health policies and actions and highlights the importance of the humanitarian issue. Moreover, this research is significant for public health from the administrative, legal and humanitarian perspective on the Covid-19 priority vaccination process going on in current times. Furthermore, the current study explains the need to treat old-age prisoners on a priority basis and to what extent international health organizations are making efforts to establish criteria to vaccinate this societal segment.

This study is an advance to the body of knowledge related to the equitable distribution of the Covid-19 vaccine among prisoners all over the world and is among the earliest legal studies related to health and pandemic vaccination regulations and highlights its importance. This research has uniquely explored the prisoners and Covid-19 phenomenon and summarized related regulatory frameworks, and integrated a humanitarian view and a legal view of equitable treatment of prisoners in a crisis. Moreover, this study is unique in an attempt to summarize all regulatory data related to prisoners' treatment as per international laws. Additionally, the research has provided a summary of clauses that address the exclusive treatment of old-age prisoners. Finally, this research provided recommendations for government policymakers and law-making institutions to provide amendments to existing regulatory frameworks to facilitate prisoners' priority treatment in the Covid-19 era.

## Conclusion and future research directions

As emphasized in the WHO Interim Guidance on COVID-19, "people deprived of their Liberty, such as people in prisons, are likely to be more vulnerable to various diseases and conditions."<sup>25</sup> The very fact of being deprived of Liberty generally implies that people in prisons and other places of detention live in close proximity with one another, which is likely to result in a heightened risk of person-to-person and droplet transmission of pathogens like COVID-19."<sup>57</sup> Thus, there is a dire need to take care of prisoners and provide them with basic priority health facilities available to the common people. In the current study, the authors tried to engage human rights and related principles to identify the prevailing laws and regulations

regarding prisoners' health requirements and how they can be made more equitable, sustainable, and effective. Particularly human rights applications suggest that those already deprived of certain life facilities are more vulnerable to getting infected with the virus; therefore, policies and procedures should be devised to deal with such geographically marginalized populations like prisoners explicitly. This approach can help ensure that prisoners' dignity is respected and their wellbeing is guaranteed.

Along with several strengths in addressing the important gaps in the literature, the current study has few limitations. For instance, it has been conducted in an international context without specifying the prisoners' health conditions in a specific area or a country because explorations in this unique area are scarce. In contrast, future researchers can extend this line of study by explicitly comparing the international laws with national laws and treaties of a specific county to check the applicability and viability of the laws of that specific area and whether they are in line with the international laws and meet the standards of international laws or not. A cross-country compassion can also be performed to check prisoners' health treatments and laws in developed and developing nations or European and Asian regions. Moreover, future researchers can extend the line of study by investigating the impact of various factors or stressors that impact the prisoners' health conditions, both physical and mental and further impact their wellbeing.

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