’21

前期日程

小論文

（医学部医学科）

注　意　事　項

1. 試験開始の合図があるまで，この問題冊子を開いてはいけません。
2. 問題冊子は１冊(11 頁)，解答用紙は３枚，下書用紙は２枚です。落丁，乱丁，印刷不鮮明などの箇所がある場合には申し出てください。
3. 氏名と受験番号は解答用紙の所定の欄に記入してください。
4. 解答は指定の解答用紙に記入してください。
   （１）文字はわかりやすく，横書きで，はっきりと記入してください。
   （２）解答の字数に制限がある場合は，それを守ってください。
   （３）ローマ字，または数字を使用するときは，マス目にとらわれなくてもかまいません。
5. 解答用紙は持ち帰ってはいけません。
6. 問題冊子と下書用紙は持ち帰ってください。

以下の文章を読んで、問１～問10に答えなさい。*の付いた語には末尾に訳注があります。

Introduction

There is a growing global recognition that infant and childhood vaccine* uptake rates are not where they need to be for adequate control of vaccine-preventable diseases. The large measles* outbreaks in high- and middle-income countries in the past decade have highlighted the dangers of the many coverage gaps. These outbreaks have led several countries to enact, strengthen, or contemplate mandatory* childhood immunization legislation.

There are three main triggers (1) that historically have prompted calls for a shift to mandatory immunization. One has been a failure of less coercive* methods to motivate people to vaccinate, such as public health education campaigns, nudge* strategies such as requesting documentation of immunization on school entry, and other interventions aimed at overcoming vaccine hesitancy*. When interventions such as these do not lead to increased uptake rates, there can be increased pressure from public health and/or policy makers to move from persuasion* and nudges to strategies that explicitly* limit choice.

The second is an outbreak of one or more vaccine-preventable diseases, which results in harm and increased public concern about low vaccination coverage. The 2015 measles outbreak in the United States of America in California is an example, with ripples* felt across the United States and beyond. This outbreak was associated with improved parental confidence in vaccines and good support for mandates among parents who were aware of the outbreak. In Italy, the move to change measles-mumps*-rubella* vaccine from voluntary to mandatory in 2017 was due in part to the large measles outbreak.

In the third instance, to achieve the global vaccine-preventable disease elimination goal for wild polio*, the mean uptake rates must be high enough to prevent transmission, pockets of unimmunized must be minimized and disease

surveillance high in order to detect break through cases so further local rounds* of immunization can be undertaken. Mandatory immunization has proven to be a compelling* component in the polio global elimination plan. As this goal grows closer, the pressure on the remaining countries with cases has increased.

In these first two situations, the adoption* of legislation or decree* to mandate childhood immunization can be appealing as this appears to be a straight-forward solution to addressing the important public health problem of low vaccine uptake with the failure to prevent outbreaks of vaccine-preventable disease. Even some countries with high uptake rates and no vaccine-preventable disease outbreaks have considered this policy because of the high profile* mandatory immunization has gained globally. However, as history has shown, mandatory immunization is neither a simple nor fail-safe* intervention. Furthermore, the planning and implementation* of a mandatory program can be challenging, from both practical and operational perspectives.

1. Definitions of mandatory immunization and variations in frameworks

Broadly defined, mandatory infant and childhood immunization programs are immunization requirements implemented at the individual level to control vaccine-preventable diseases at the population level. There is, however, no World Health Organization definition of mandatory immunization. In 2010, a meeting in Europe exploring mandatory immunization proposed the definition that a 'mandatory' vaccine is one that every child in the country/state must receive by law without the possibility for the parent to accept or refuse it, independent of whether a legal or economical implication* or sanction* exists for the refusal. Regardless, immunization programs described as mandatory vary widely, even in high-income countries, ranging from: (2)

・Laws requiring immunization although anyone can opt-out* without penalty; no enforcement (soft, i.e. flexible mandates)

・Laws requiring immunization but can easily opt-out with personal or philosophical objection without penalty (medium soft mandate)

・Laws requiring parental education about immunization (rather than immunization itself); may opt-out with personal or philosophical objection but requires specific forms and notarization* but no penalty for noncompliance* (medium hard mandate, i.e. "informed consent" mandates)

・Laws requiring immunization but can opt-out with personal or philosophical objection that requires specific forms and added effort. There is a penalty for noncompliance and strict enforcement (higher medium hard mandate)

・Laws requiring immunization with serious financial penalties or social restrictions; only allow medical exemptions*; strict enforcement (hard mandates)

2. Ethical justification of mandatory immunization

Mandatory immunization, particularly more rigid forms, has long been controversial predominately because of ethical concerns about coercion*. At its core, mandatory immunization requires a principled calculus*, a careful weighing of the indications*, evidence and arguments, regarding the responsibilities of public authorities to act in support of the public good, and the potentially countervailing* rights and responsibilities of individuals. We offer a brief exploration here, emphasizing these two aspects (3) but also noting broader values and virtues that are implicated.

Governments have moral and legal responsibilities to safeguard their populations, both collectively and individually, facilitating as much freedom as can be justified in a democratic, rights-oriented society. One way to achieve this broad goal of safeguarding the health of the population is through immunization programs. Immunizations confer* benefit to both the individuals and the public (through community immunity). However, those who choose not to be

immunized are at risk of being both victim of a vaccine-preventable disease and the vector for spread of the disease to others in the community. (4) Given that some in the community must rely on community protection because they have underlying medical conditions that preclude* immunization or make it ineffective, those who opt-out put others at risk. Furthermore, the risk is not uniform in a community, as the non-immunized tend to cluster, further increasing the risk locally for those who cannot be immunized. Hence, for vaccine-preventable diseases where the consequences of individuals not accepting a vaccine can be viewed as a considerable risk for others in the community, mandating immunization may be an appropriate and acceptable intervention. Increased risk of harm to others by those who don't immunize (5) (clean hands principle: those seeking justice must themselves act justly and fairly) is one of the ethical justifications for mandatory immunization policies.

(6) Refusal to accept immunization based on conscientious* grounds (i.e. religious, moral or philosophical/personal reasons) is seen by some ethicists as comparable to conscientious objection to mandatory military service. When refusing mandated immunization, they suggest that the objectors "should make an appropriate contribution to society in lieu of* being vaccinated". There is a lack of clarity and agreement on this but it might be a financial penalty or access restriction to specified societal services/benefits noted in some mandatory childhood immunization policies.

Even if a mandatory immunization policy is justifiable from the ethical standpoint of decreasing risk of harm to others or making an appropriate contribution to society in lieu of immunization, there still may be other ethical reasons not to embark* on this route. One is the principle of the "least restrictive alternative". Globally, justification of restrictions on individual rights as articulated* in the International Covenant on Civil and Political Rights, must be proportional, i.e. the least restrictive alternative must be adopted. While specifically applied in public health emergencies, wider application beyond the

narrow emergency context is justified. With respect to mandatory immunization, policies that do not eliminate the ability to opt-out but make opting-out more difficult to obtain may be such a "least restrictive alternative" ("informed consent" mandatory program).

These ethical arguments concerning mandatory immunization all assume that it is being applied to address low uptake rates (7) due to vaccine refusers. Low uptake may be due to other reasons such as barriers to access, especially in middle- and low-income settings. Even in high-income countries, some barriers to access to immunization can be present and are not remedied* by a mandatory immunization decree with penalties. This brings up the ethical principle of justice, i.e. equity of benefit and risk. This is not a simple equation as mandatory immunization may or may not address equity issues and/or support social integration of minorities who may have been stigmatized* in the past for being seen as major vectors for vaccine-preventable diseases. If a mandatory approach leads to increased funding for mandated vaccines and more resources for the immunization program then higher vaccine uptake may increase community immunity and may support more equitable access to vaccines, including, access by minorities. Hard mandates for influenza immunization of healthcare workers in hospitals, while controversial, has been shown to result in very high uptake rates sustained over a number of years leading to more protection for the most vulnerable patients.

Given that vaccines, like any drug, are neither 100% (ア) nor 100% (イ) (8), another ethical consideration relevant when assessing the justification of a mandatory program for a country or state is compensation* (9) for causally associated serious, albeit* rare, adverse events following immunization, e.g. anaphylaxis*, immunization program errors. How the mandatory program deals with adverse events following immunization that are causally determined to be due either to the mandatory vaccine itself or to a flaw in the immunization program delivering the vaccine also raises ethical justice issues. Ultimately, there

is a strong argument that mandatory immunization programs can be ethically justified when adverse events following immunization compensation programs for serious adverse events following immunization also exist. However, it is not currently clear what percentage of countries with mandatory childhood immunization programs also have compensation programs nor how easy these are to access. A 2011 review documented 19 countries with adverse events following immunization compensation programs, though the relationship to mandatory immunization was not discussed, and none of the observed compensation programs were in low-income countries.

（Mandatory infant & childhood immunization: Rationales, issues and knowledge gaps. MacDonald NE, Harmon S, Dube E, Steenbeek A, Crowcroft N, Opel DJ, Faour D, Leask J, Butler R. Vaccine 36:5811-5818（2018）より一部改変して引用 .
Reprinted from Vaccine, Vol.36, Noni E.MacDonald,Shawn Harmon,Eve Dube,AudreySteenbeek,Natasha Crowcroft,Douglas J. Opel,David Faour,Julie Leask,RobbButler, Mandatory infant & childhood immunization:Rationales, issues and knowledge gaps, Pages 5811-5818, Copyright 2018, with permission from Elsevier. ）

訳注

vaccine ワクチン

measles 麻疹、はしか

mandatory 強制的な

coercive 強制的な

nudge 注意を促して望ましい行動へ誘う手法

hesitancy 躊躇、ためらい

persuasion 説得

explicitly はっきりと、明白に

ripples さざ波、余波

mumps 流行性耳下腺炎、おたふく風邪

rubella 風疹

wild polio 野生株ポリオ（脊髄性小児麻痺）ウイルス

rounds 巡回診療

compelling 注目すべき、人を動かさずにはおかない

adoption 採用、採択

decree 法令、政令

high profile 目立つ、優勢

fail-safe 安全制御(安全側に制御されていること)

implementation 実行、実施

implication 含蓄

sanction 是認

opt-out オプトアウト(拒否、脱退、辞退すること)

notarization 証書

noncompliance 不履行(不参加)

exemption 免除

coercion 強制

calculus 見積もり、計算

indication 適用対象

countervailing 対抗する

confer 授与する、贈る

preclude 排除する、妨げる

conscientious 良心的な

in lieu of に代わる

embark 積み込む、乗り込む

articulate 明示する

remedy 救済する、改善する

stigmatize 烙印を押す

compensation 補償

albeit たとえ…でも

anaphylaxis アナフィラキシー(即時型全身性アレルギー反応)

問 1　下線部(1) three main triggers について、それぞれ 40 字以内で説明しなさい。

問 2　下線部(2) immunization programs described as mandatory vary widely について、どのように vary widely なのか 80 ～ 120 字で説明しなさい。

問 3　強制的ワクチン接種における下線部(3) these two aspects として適当なものを以下のＡ～Ｅから１つ選び、アルファベットで答えなさい。

Ａ．a principled calculus and a careful weighing

Ｂ．evidence and arguments

Ｃ．the public good and the rights and responsibilities of individuals

Ｄ．rights and responsibilities

Ｅ．values and virtues

問 4　下線部(4) Given that some in the community must rely on community protection because they have underlying medical conditions that preclude immunization or make it ineffective, those who opt-out put others at risk.を 80 ～ 120 字で和訳しなさい。

問 5　下線部(5) clean hands principle について、このパラグラフの論旨に含まれないものはどれか。以下のＡ～Ｅから１つ選び、アルファベットで答えなさい。

Ａ．ワクチン接種を強制的に実施する場合、clean hands principle に基づきその実施方法は正しくかつ公正なものでなければならない。

Ｂ．ワクチン接種を拒絶することによって、接種を受けることができない他の人のリスクを増大させることは、正しくかつ公正とは言えない。

Ｃ．ワクチン未接種者は、社会にとって脅威であり、社会に危害を与えるリスク要因といえる。

Ｄ．Clean hands principle に基づき、強制的なワクチン接種は他人への危害を防ぐという点で正当化されうる。

Ｅ．Clean hands principle とは、正義を探求する者は、正しくかつ公正に行動しなければならないという意味である。

問 6　下線部(6) Refusal to accept immunization based on conscientious grounds のような人たちについてはどのようにするべきか。本文の論旨に合うものを以下のＡ～Ｅから１つ選び、アルファベットで答えなさい。

Ａ．社会的弱者の存在について説明し、集団免疫の重要性を理解してもらう。

Ｂ．ワクチン接種の代わりとなる感染予防対策や社会貢献をしてもらう。

Ｃ．社会防衛のためにあくまでも強制的にワクチン接種を受けてもらう。

Ｄ．公共善の考え方について理解してもらう。

Ｅ．ワクチン接種拒絶者は社会にとってリスクであるため、排除する。

問 7　下線部(7) low uptake rates を改善するための留意点として本文の論旨とは異なっているものはどれか。以下のA～Eから1つ選び、アルファベットで答えなさい。

A．社会インフラの整備

B．ワクチンの継続的な供給

C．利益とリスクの公正な配分

D．社会的少数者(マイノリティ)の包摂

E．接種拒否者への烙印

問 8　下線部(8) neither 100% [　(ア)　] nor 100% [　(イ)　] の(ア)と(イ)にはどのような単語の組み合わせが入るか。以下のA～Eから1つ選び、アルファベットで答えなさい。

A．(ア) hard　　(イ) flexible

B．(ア) effective　　(イ) safe

C．(ア) mandate　　(イ) opt-out

D．(ア) justified　　(イ) unjust

E．(ア) simple　　(イ) practical

問 9　下線部(9) compensation について、本文の論旨に合うものはどれか。以下のA～Eから1つ選び、アルファベットで答えなさい。

A．強制的ワクチン接種を実施する場合、副作用はあってはならない。

B．強制的ワクチン接種を実施する場合、副作用に対する補償制度を整えるべきだ。

C．ワクチン接種が強制的でなければ、副作用に対する補償制度は必要ない。

D．高所得国での補償制度は既に充実している。

E．低所得国では、補償制度はなくても仕方がない。

問10　感染症予防対策として、強制的ワクチン接種以外にも強制的な検疫や隔離、移動制限など、基本的人権を侵害する対策が行われることがある。それについて、300 ～ 400 字で本文の論旨と自らの意見を論じなさい。

（以下、余白）