"If a rabbi did say 'you have to vaccinate,' we wouldn't": unveiling the secular logics of religious exemption and opposition to vaccination

Maintaining 'faith' in vaccination has emerged as a public health challenge amidst outbreaks of preventable disease among religious minorities and rising claims to 'exemption' from vaccine mandates. Outbreaks of measles and coronavirus have been particularly acute among Orthodox Jewish neighbourhoods in North America, Europe and Israel, yet no comparative studies have been conducted to discern the shared and situated influences on vaccine decision-making.

This paper synthesises qualitative research into vaccine decision-making among Orthodox Jews in the United Kingdom and Israel during the 2014-15 and 2018-19 measles epidemics, and 2020-21 coronavirus pandemic. The methods integrate 66 semi-structured informal interviews conducted with parents, formal and informal healthcare practitioners, and religious leaders, as well as analysis of tailored non-vaccination advocacy events and literature.

The paper argues that the discourse of 'religious' exemption and opposition to vaccination obscures the diverse practices and philosophies that inform vaccine decisions, and how religious law and leaders form a contingent influence. Rather than viewing religion as the primary framework through which vaccine decisions are made, Orthodox Jewish parents were more concerned with safety, trust and choice in similar ways to 'secular' logics of nonvaccination. Yet, religious frameworks were mobilised, and at times politicised, to suit medicolegal discourse of 'exemption' from coercive or mandatory vaccine policies. By conceptualising tensions around protection as 'political immunities,' the paper offers a model to inform social science understandings of how health, law and religion intersect in contemporary vaccine opposition. "If a rabbi did say 'you have to vaccinate,' we wouldn't": unveiling the secular logics of religious exemption and opposition to vaccination

1.Introduction

The dilemma of whether to vaccinate has emerged as a leading global health challenge, and the need to protect public confidence in vaccination has accelerated amidst coronavirus prevention programmes (WHO, 2019; Schwartz, 2020). In attempting to understand the issues that underlie non-vaccination, social scientists have examined how people navigate risk and how health decisions are formulated within social worlds (Casiday et al., 2006; Casiday, 2007; Leach and Fairhead, 2007; Poltorak et al., 2005; Sobo, 2015). Religious 'beliefs' are often framed in social science research as a distinct form of opposition to vaccines, but, as Hobson-West (2003) argues, scholars rarely explain how religion becomes a rationale *not* to vaccinate. Since no major religious doctrine explicitly forbids vaccination (Grabenstein, 2013), what might claims to 'religious exemption' involve and to what extent are such claims commensurate with 'secular' reasons for non-vaccination? Addressing these questions accounts for how claims to exemption are based on contestations around safety, and how religion is mobilised, and at times politicised, to suit medico-legal discourse of vaccine mandates.

Religious devotees consider political and economic tensions when making sense of biomedical interventions and formulating ethical decisions, which offers a backdrop to discern the apparent binary surrounding 'religious' and 'secular' responses to vaccination. When examining diverse Islamic responses to organ transplantation in Egypt, Hamdy (2008) observed how the relationship between religious faith, biomedical interventions and state institutions was a palpable influence. Hamdy (2008) conceptualises how Muslim dialysis patients in Egypt

attributed kidney failure to 'political etiologies,' including (mis)trust in state institutions and failures of governance. Building on Hamdy's (2008) analysis of how the political economy of health is discursively linked to chronic disease aetiologies, I argue that a model of 'political immunities' can capture how health, law and religion intersect in contemporary vaccine opposition.

Immunity is a dual biological and legal term that signifies conditions of exemption and protection (Esposito, 2015), and this relational tension unveils the polemics at play within the model of 'political immunities' offered in this paper. Amidst outbreaks of infectious disease and the coronavirus pandemic, vaccines have become invested with heightened values to protect social and economic livelihoods on the one hand, while raising debates about vaccine mandates and the appropriate balance between collective protection and protected liberties (Chantler et al., 2019). The paper builds on these debates by examining how claims to religious exemption are formulated on secular reasoning, which can support social scientists to track the multiple and emerging ways that rights to non-vaccination are articulated. A model of 'political immunities' then grasps how 'faith' in vaccination is determined by perceptions of the political economy of healthcare and evolving disputes over protection (including its multiple definitions) – and how public responses are shaped both by globalized discourse and local context. Moreover, this analytical shift can critique the structural dynamics at play in vaccine decisions beyond the dominant framings of 'beliefs' or 'hesitancy,' which tend to place an emphasis on people rather than issues in the production and governance of biomedical technologies.

This paper explores the discourse of religious exceptionalism and 'political immunities' based on a comparative study of vaccine decision-making among Orthodox and Haredi ('strictly Orthodox') Jews in the United Kingdom and Israel amidst epidemics of measles and coronavirus.

Religion and vaccination were not perceived as being in tension. On the one hand, parental concerns around vaccination reflected the 'secular' objections observed broadly by social scientists – particularly safety doubt. On the other hand, parents who opposed vaccination tended to project their safety concerns as a religious prerogative not to vaccinate. The findings suggest that safety-based concerns underlie claims to religious 'exemption,' which raises implications for current debates around the appropriate balance of public health protection and religious freedom.

1.1 Religious exceptionalism and 'opposition' to vaccination

While vaccines are lauded for protecting population health, social scientists also conceive state vaccination programmes as 'political projects that presume to shape the immunity of whole populations' (Greenough et al., 2017:1) – and which cultivate citizenly ideals. Rather than a 'minority health' issue, non-vaccination among ethnic and religious minorities is viewed by public health services as undermining the immunity of the body politic (Kasstan, 2019). More broadly, social anxieties around vaccination serve as a medium for relations with state authority (Leach and Fairhead, 2007; Renne, 2006), with non-vaccination constituting a moral logic to go against 'the herd' (Sobo, 2015, 2021).

Political analysis of non-vaccination among religious minorities is most often situated in the global south, where attempts to enforce vaccination policies play into entrenched minoritystate tensions. In the Muslim-majority area of Northern Nigeria, heavy-handed government intervention to suppress polio vaccine refusal and political resistance reinforced Islamic scholarly positions that the vaccines were contaminated to reduce Muslim fertility rates (Renne, 2006). Attempts to achieve higher vaccination coverage rates through force are, however, generally not practiced in the global north (Renne, 2014: 478), and often take the form of coercion by being tied to welfare benefits or school entry mandates.

A range of jurisdictions, especially US states, make provisions for religious exemption from vaccine mandates, which has the consequence of maintaining a binary-claim of il/legitimate reasons for non-vaccination. Yet, evidence suggests that "religion" often serves as [a] cover for anti-vaccine sentiments that have little to do with any organized faith's official teachings' (Sobo, in press). Scholars argue that those who claim religious exceptionalism often lie and literally 'take the Lord's name in vain' (Reiss, 2014: 1551; Reich, 2018). Less attention is given to how people of faith articulate 'religious' exemptions to vaccination based on 'secular' readings of vaccine safety doubt.

Minority religious groups are associated with lower probability of uptake (de Figueiredo et al., 2020), and lower-level vaccination coverage among religious minorities has resulted in localised and persistent measles outbreaks, which transcend regional, national and international boundaries (McDonald et al., 2019; Patel et al., 2019). Religious authorities are thus perceived as key stakeholders in public health policy and delivery strategies (UNICEF, 2004), with the ability to influence decisions of devotees and respond to ethical questions and concerns. Religious devotees, however, frequently negotiate the positions of faith leaders in diverse ways and pursue autonomy over healthcare decisions to secure desired outcomes (Taragin-Zeller, in press).

The case for religious exemption to specific vaccines (not *vaccination* per se) can be based on reasoned argument due to legal and moral concerns. The Catholic Church has extensively debated the ethics of using vaccines that are cultured on human-cell lines and derived from aborted foetal tissues (such as rubella), and foreground the 'responsibility' to use alternatives wherever possible (Pontifical Academy for Life, 2019). The human papillomavirus

(HPV) vaccine has sparked broad opposition among Muslims, Orthodox Jews and African American Christians (Gordon et al., 2011; Forster et al., 2016; Lahijani et al., 2021), which reflects a broader issue of how the HPV vaccine has been associated with the moral regulation of gender and sexuality (Gottlieb, 2018). Muslim parents in the UK have also refused influenza vaccines that contain porcine gelatine (Paterson et al., 2018). Doctrine, however, should not be over-determined as the primary influence on vaccine acceptance, especially as ethnic and religious minority groups in the UK are less likely to accept vaccines that do not contain porcine – including the newly developed coronavirus vaccinations (ONS, 2021; SAGE, 2021).

1.2 Orthodox Judaism, vaccination and measles outbreaks

The UK and Israel are highly-vaccinated societies, yet, continuous outbreaks of vaccinepreventable diseases have occurred in religiously Orthodox Jewish neighbourhoods (Anis et al., 2009; Letley et al., 2019; Muhsen et al., 2012). Lower-level measles vaccination coverage among Orthodox and Haredi Jewish neighbourhoods in these settings has led to public health claims that they constitute 'hard to reach' and 'non-compliant' minorities (Anis et al., 2009; Lernout et al., 2009). Claims that Haredi Jews form 'non-compliant' minorities became intensified following the 2014-15 and especially 2018-19 measles epidemics, the latter of which emerged in Jewish neighbourhoods of New York and were attributed to non-vaccinated travellers arriving from Israel (McDonald et al., 2019). A public health emergency was dramatically declared in April 2019 (Silverberg et al., 2019), and led to the US experiencing its highest cases of measles in twenty-five years (Patel et al., 2019) – as was the case in Israel (Stein-Zamir et al., 2019). Haredi neighbourhoods in London, New York and Jerusalem have since experienced disproportionately higher rates of coronavirus (Gaskell et al., in press; Stein-Zamir and Levine

2021; Zyskind et al., 2021), which have intensified claims of 'non-compliance' with public health interventions.

Studies report conflicting reasons for lower-level vaccination coverage among Orthodox and Haredi Jewish neighbourhoods, which have been attributed to 'cultural' and 'religious' antivaccination sentiments (e.g. Henderson et al., 2008), issues of convenience and accessibility of services due to larger family sizes (Letley et al., 2019) and targetted non-vaccination messaging (Kasstan, 2021). Orthodox and especially Haredi Jews formulate health decisions in close consultation with religious scriptures pertaining to law and according to various stringencies. The body of Jewish law (*halachah*) is based on Biblical commandments and extensive commentaries, which rabbinic authorities creatively interpret when sanctioning the use of emerging biomedical technologies (Kahn, 2000). There is no doctrinal position against vaccination in Jewish law (see Loewenthal and Bradley, 1996), though rabbinic authorities generally regard childhood vaccines as an acceptable method of health protection.

The extent of recent outbreaks of vaccine preventable diseases among Orthodox and Haredi Jewish neighbourhoods signals that vaccine decisions are being influenced by more than *halachah* and rabbinic authority. Establishing a model of 'political immunities' then foregrounds how responses to vaccination programmes among parents of faith involve negotiating plural structures of religious and civil authority and law, which raise challenges for how claims to 'religious exemption' are discerned.

2. Methods

To address the question of what informs 'religious opposition' to vaccination and claims to exceptionalism, this paper integrates data from two ethnographic research projects examining child health decision-making among Jewish minorities in Manchester and Jerusalem. Routine childhood vaccinations are provided free of charge under NHS England, and as part of child health services in Israel (*'Tipot Chalav*,' drops of milk), which enables a comparative study of the decisions that underly non-vaccination when vaccination services are routinely accessible.

Qualitative research was conducted in both settings, and involved participant observation in homes and neighbourhoods, 66 in-depth semi-structured interviews, and text analysis of community-specific health information as well as rabbinic texts. The research particulars are outlined below in each country-context (see 2.1-2.4). A primary 3-year research project (2013-16) was conducted in Manchester focusing on maternity and infant care among Orthodox and Haredi Jews, amidst the 2014-15 international measles outbreaks. My interest in conducting a comparative study of vaccination led to subsequent 12-month qualitative research project focusing specifically on vaccine decision-making in Jerusalem and the surrounding region between 2019-20, following the 2018-19 outbreaks of measles and 2020-21 coronavirus pandemic.

Studies report strained public health relations with Orthodox and Haredi Jews, particularly among minorities in Israel that do not recognise state authority due to philosophical opposition to Zionism, which can manifest in a reluctance to engage with state-provided services (Stein-Zamir et al., 2008). During past measles outbreaks, vaccination teams were 'disguised' 'so they could gain access to institutions that did not wish to be seen as obtaining services from official state bodies' (Stein-Zamir et al., 2008). An ethnographic approach instead enabled me to maintain a sense of neutrality and distance from public health providers, and afforded engagement with Jewish parents within their neighbourhoods and communal structures.

Interviews were recorded using a digital audio recording device, when permission was granted, and detailed notes taken. Recordings from interviews and participant observations in the

field were transcribed verbatim and analyzed using grounded theory (Corbin and Strauss, 1990), whereby theoretical insights emerge from the data rather than being pre-conceived. Analysis was based on a separate and comparative basis, raising common as well as situated issues that include, access to vaccination services; experiences of adverse reactions; influence of religious texts and authority in vaccine decision-making; non-vaccination as an expression of religious freedom. Participants provided written or verbal consent. In March 2020, the Israeli Government instituted public health restrictions in response to the COVID-19 pandemic. A further 5 followup interviews were conducted using telecommunications. Ethical approval was obtained from the Institutional Review Boards of Durham University and the Hebrew University of Jerusalem.

2.1 Orthodox and Haredi Jews

Haredi Jews can be distinguished from Orthodox Jews by avoidance of secular education and professional training, and a cautious use of the internet (Fader, 2020). Common to Haredi neighbourhoods, whether in the UK, USA or Israel, is an internal economy, and select encounters with the non-Haredi world. The Haredi world consists of multiple groups, each with their own religious leaders, teachings, and observances. This population can be loosely divided into Lithuanian yeshiva-based or *Torah* learning communities, Hasidic dynasties who often speak Yiddish as a first language, and Sephardi and Mizrahi Haredim (who trace their origins to the Iberian peninsula, North Africa and the Middle East). Differences aside, these groups present themselves as being the authoritative and authentic bearers of Judaism.

Health providers in Manchester and Jerusalem do not record information on standards of religious practice in family health records. Yet, an indicator of under- or unvaccinated Jewish children can be drawn from family size and neighbourhood clustering. Haredi Jews have total fertility rates about three times that of the UK population (Staetsky and Boyd, 2015) and that of the secular Jewish-Israeli population (Malach and Cahaner, 2018), and four times that of the US population (JPPI, 2014). Measles outbreaks in London, New York and Jerusalem have been linked to the combination of larger and under-vaccinated child and youth demographic, which is characteristic of Haredi Jewish neighbourhoods (Letley et al., 2019; McDonald et al., 2019; Stein-Zamir et al., 2020).

2.2. Manchester

Haredi Jews constituted, at most, 16 percent of the UK's Jewish population (approximately 275,000) at the time of the 2011 census (Staetsky and Boyd, 2015). Manchester has among the fastest growing Jewish populations in both the UK and Europe. 12 months of ethnographic research (2013–2014) were conducted in Manchester to evaluate perceptions of pregnancy care and infant health among Haredi Jewish families. 43 semi-structured interviews were conducted with Haredi parents, doulas, midwives, allied healthcare professionals, physicians, and rabbinical authorities.

2.3 Jerusalem

Haredi Jews account for roughly 12 percent of the Israeli population (Malach and Cahaner, 2019). There are approximately 900,000 residents in Jerusalem, 34 percent of which are Haredi (Korach and Choshen, 2018). During 2019-20, 23 semi-structured interviews were conducted with Jewish parents who had immigrated from the US, UK, Canada and South Africa. The purpose of working with this migrant population was to understand how perceptions of vaccination travel in a 'global religious network' (Taragin-Zeller and Kasstan, 2020).

Participant observation was conducted in non-vaccination advocacy events tailored to the English-speaking Orthodox and Haredi Jewish population in Jerusalem, as well as Haredi bookstores, which constitute troves of information pertaining to health and bodily care (Stadler, 2009). I was able to approach participants through the above study of vaccine decision-making in the UK, as well as snowball sampling techniques. A further 2 interviews were conducted with physicians serving Orthodox and Haredi Jewish families in the Jerusalem region, and 5 follow-up interviews were conducted during the COVID-19 pandemic.

3. Findings

Analysis of vaccine decision-making among religiously Orthodox families in Manchester and Jerusalem demonstrates that a conceptual model of 'political immunities' consists of 4 overarching determinants: the typecasting of religious minorities by service providers; perceived transparency of vaccine providers; the internal politics of 'authoritative knowledge' (Jordan, 1997) vis-à-vis religious leaders and law; and the ways in which knowledge is mobilised in relation to local vaccine governance and in dialogue with situated ideas of liberty.

3.1 Assumptions and accessibility

Physicians who lived in, and served, the Orthodox and Haredi Jewish neighbourhoods in Manchester and Jerusalem tended to see 'convenience' as the primary issue underlying lowerlevel vaccination coverage. Dr Zahava, a physician in Jerusalem, said the tendency to have larger family sizes meant that parents were 'just too busy with a billion kids and couldn't make an appointment' (February 2020). Similarly, Dr Horesh, a physician in Manchester, quite flippantly remarked that 'if you've got nine kids and three of your kids have missed out on immunisations, it's not really surprising because you've got other things to do' (September 2014). While

research indicates that convenience contributes to the underlying issue of lower-level vaccination coverage (Letley et al., 2019), the tendency to typecast parents as being unable to prioritise child health implies neglect and overlooks their concerns.

Frida, a mother of two, described the challenges of accessing vaccination services in her Jerusalem neighbourhood. As a working parent, she 'just wanted to get in and out as fast as possible' (January 2020), which could be difficult with inefficient services. Scheduling appointments was reported to be more of an issue in Israel (where vaccines are administered in specialist mother-and-baby clinics rather than primary care clinics, as is the norm in the UK). Parents reported appointments being rescheduled to alternative clinics that were inaccessible, especially for families without access to cars. As Ora said, "I had to be very noisy to get an appointment at the right time and at a place that I could reach" (February 2020). Vaccination services, then, were not always perceived as able to meet expectations or be conducive to the pressures facing religious families. Rather than the quantity of children being an obstacle to engaging with vaccination services, parents more commonly voiced concern around the quality of care and reported diverse experiences when it came to relationships with healthcare providers.

3.2 Responsiveness to vaccination encounters, experiences and expectations

Sara was a mother of nine living in Manchester, and she described how her concerns around vaccines stemmed from an adverse reaction from the diphtheria, whooping cough and tetanus vaccine (which is no longer used in England):

I was warned that he might have a temperature. I monitored him and it was peculiar for a few days. He broke out in a rash all over; it was like an eczema rash, which didn't go away for months and months. He was inconsolable and had this weird highpitched cry for days, and he had a temperature on and off for days. I was a bit freaked out by it. I went back to the doctor who said, 'oh it's nothing, it's fine.' So, I was very scared 'coz I thought they're pushing for something and they're not being honest, and it really scared me off the whole idea of vaccines. I spoke to the doctor about it, I said, 'look, it seems to me that my son had a vaccine reaction and I think it needs documenting'. And he said, 'Yes, we'll document it. Don't worry'. And he didn't. It bothered me. I said, 'it was clearly a vaccine reaction' because he was trying to persuade me that the statistics for having negative reaction were not that high, but the statistics if you didn't vaccinate were high, and using a lot of emotive language like 'I've seen children with measles in hospitals and if only you'd seen, statistically it's safer to give than not to give.' I said, 'but you've not recorded him as a vaccine reaction so how can you say the statistics are fair?' (January 2015)

Sara subsequently declined all vaccinations for her seventh, eighth and ninth children – much to the frustration of her local GP. When I asked whether she also drew on Jewish law to inform her vaccine decision-making, she clearly stated, 'there's no religious anti-sentiment to vaccines, on the contrary. If it's the right thing to do, you must do it. This was nothing to do with religion at all, this was just watching a child who reacted.' Hence, her safety concerns reflect the 'secular' deliberations observed among parents in the broader UK population (see Casiday, 2007; Leach and Fairhead, 2007; Polterak et al., 2005). Yet, the tendency to essentialize religious 'beliefs' as a cause for non-vaccination is then at odds with how religiously Orthodox parents make vaccine decisions based on safety perceptions.

Sara's experience signals that negative experiences around vaccination can influence vaccine decision-making in subsequent children, which presents a more acute challenge for public health services when family-sizes are larger (as is the norm in Haredi neighbourhoods). In contrast, Dinah, a British Orthodox Jewish mother living in an Israeli settlement in the Occupied Palestinian Territories (OPT), remarked how her firstborn child 'had quite a bad reaction to one of the vaccines in his leg, his leg went swollen and quite numb' (January 2021). She subsequently decided to procure individual vaccinations for her subsequent four children, and appreciated the support of her local *Tipat Halav* clinic, 'the nurse was happy to do so and didn't question my decision, it wasn't just "stab your children and leave," it was reassuring.' Responsiveness to vaccine encounters, experiences and expectations can then have a profound impact on provider-patient relationships.

Vaccine decisions are determined by diverse issues that span convenience and confidence in similar ways to non-religious populations in the US and UK. Underlying issues of confidence, however, are concerns with safety and the transparent recording of adverse reactions (see also Casiday and Cox, 2006), signalling how the political economy of vaccination emerges as a cause of parental concern.

3.3. Interpretative conflicts and the politics of 'authoritative knowledge'

Esther, a mother of four in Manchester, explained that, *'halachically* [according to Jewish law], one should do everything in their power to put themselves in a good position to protect themselves. Because you're supposed to live *Torah* [the Hebrew Bible], you have to protect your children, you have to do everything in your power to protect your child and if that is to vaccinate your child, you should' (August 2015). Parents in Manchester and Jerusalem broadly shared her position on religious motivations for vaccination, yet interpretative conflicts surrounding ideas of protection in Jewish law and teachings arose. Yehudis, a Hassidic mother in Manchester, was opposed to vaccination on the grounds of safety, and counselled mothers in her neighbourhood not to vaccinate. She drew on the codex of rabbinic legal commentary (*Gemarah*) to argue that, while vaccines were not forbidden under *halachah*, they were dangerous interventions – which constituted a clear form of religious transgression:

In the *Gemarah* it says that it is worse to do something dangerous than to do something which is forbidden. And that's the Jewish law – you can see from there that it is possible that punishment is allowed for danger and that is even worse than something that is forbidden.' (March 2015)

Similar positions were held by parents in Israel. Tehillah, a grandmother in her 60s, living in an Israeli settlement in the OPT, refused to vaccinate her six children on the grounds of safety, and also played a hand in how her grandchildren were vaccinated. She perceived vaccines as dangerous, and went on to explain that there was no *halachic* legal requirement to put her children or grandchildren at risk to protect population health:

If you can show me in the *Torah* where it says, 'you must vaccinate your child' then I would have to vaccinate my child. The *Torah* does not require people to endanger themselves for other peoples' benefit, especially if it's a *safek* [doubt, uncertainty]. It's not a sure thing that it [vaccination] helps people. There's no *halachic* stipulation that I have to put my life in danger in order to benefit somebody else. (January 2020) Jewish legal frameworks then give rise to plural and opposing interpretations for parents when it comes to vaccination, as well as ideas of protection that are at odds with state vaccination programmes. While the safety concerns that underly non-vaccination have been thoroughly explored by social scientists, what emerges in religiously Orthodox settings is how 'secular' concerns of vaccine safety are situated as a religious imperative to not vaccinate. Parents present vaccination as a question of religious in/authenticity and reckon with healthcare providers as well as communal power dynamics and forms of 'authoritative knowledge' when formulating decisions. Clear consequences arise, however, when applying this discourse to vaccine mandates (see 3.7).

3.4 The role and reliability of (male) religious authority

Parents who accepted vaccination, even selectively, did not typically view male rabbinic authority or consultation as relevant to their decision-making. Blumah, a mother of two, was born and brought up in the Chabad movement – a branch of Hassidic Judaism that is known for integrating religious healing into biomedical practices and where spiritual leaders serve as conduits of Divine care (Dein, 2002). While Blumah selectively declined the oral polio and chickenpox vaccines for her firstborn child on the basis that 'each vaccine has its own risk,' she did not feel the need to approach a rabbi for support with her decision-making:

Vaccines are almost safe, but they're not 100% safe. I never thought that there is real conflict between vaccines versus *Torah*, so I didn't see any need at all to ask our *rov* [rabbi]. The science wasn't in any shape or form against our religious principles. I haven't heard my friends and relatives say, 'I need to speak to a rabbi about this.' Not at all. (Israeli settlement in the OPT, January 2020)

Jewish parents in Jerusalem and Manchester viewed religious authority as contingent when it comes to vaccination, and not more important than parental intuition, in similar ways to how agency is sought over broader areas of health decision-making, including contraception (Raucher, 2020). While Sara (introduced above) initially refused vaccinations for her seventh, eighth and ninth children following her account of her son's adverse reaction, she was concerned that her decisions would put her children at risk. She asked herself, 'Who am I to make a big decision like this? You know, my children have a right as well.' Eventually, she decided to approach a prominent rabbi, whom she trusted, for a ruling of Jewish law (*psak halachah*) on the issue and committed herself to acting on his ruling. In her words:

I had to take the view that if I've gone to ask a rabbi then I have to abide by what he's saying. So, I took the children, except for the young man who had the reaction to the whooping cough vaccine. I didn't do him then. I was too scared, I really was. I did the rest of them, I did the whole vaccine programme and got them all up to date. I left him, I just couldn't bring myself to do it. (Manchester, February 2015)

While Sara acted on the rabbinic advice she sought out, she did so on her own terms, and she made a conscious decision to not vaccinate her son who had previously experienced an adverse reaction. Amidst the localised measles outbreaks in 2014-15, however, she decided to vaccinate the son in question against measles, and selectively declined the rest of the vaccine programme. Brynah, an Orthodox mother with one son, described being opposed to vaccines on the grounds of safety. Brynah indicated that seeking a ruling of Jewish law from a rabbi could be quite hazardous if his position conflicted with her own:

If you ask a rabbi and he says, 'you have to,' then you really have to follow it through. We could find out what he feels in a roundabout way without asking him directly, 'what should we do?' We could get somebody else and if we find out that he's open minded then we could approach him. It's worth thinking about, but in a roundabout way, so that we don't have to do what he says if we don't agree with it. The bottom line is, if a rabbi did say 'you have to vaccinate', we wouldn't vaccinate. (Manchester, March 2015)

In the Jerusalem region, religious authority was similarly contingent when it came to vaccination. Tehillah was sceptical of the role of religious authority when it came to vaccination, and told me, 'I don't feel these are issues for a rabbi who is getting his information from either the Misrad HaBriut [Ministry of Health] or a doctor who doesn't know anything about vaccines, about safety' (January 2020). Tehillah was not alone in her scepticism of religious authority when it came to vaccines, Ruth, an Orthodox mother of five, said, 'most rabbis are in favour of vaccines because they don't research it, they just listen to most doctors, whose portal of knowledge is vertical' (Jerusalem, January 2020). Their views are contiguous with those of Israeli-born Haredi mothers (Keshet and Popper-Giveon, 2021), indicating how multiple influences on non-vaccination co-exist and converge within this diverse and transnational religious population. Underlying decisions to refuse vaccination is a concern with safety, risk and trust in public health institutions. The Orthodox and Haredi Jewish parents in this study are far from unique in that regard, but what is different is how concerns of safety become voiced as a religious prerogative and right to not vaccinate, and which became amplified around the issue of coercive and mandatory vaccination policies (see 3.7).

3.5 Gender politics and women's authoritative knowledge

Focusing on male religious authority in public health strategies obscures the politics of gendered knowledge, and especially how female authorities influence the vaccine decisions of Orthodox and Haredi mothers (who can be expected to marry and begin childbearing from the age of 18). Moreover, religious Jewish mothers are overwhelmingly the primary carers of children and are expected to take responsibility for health decision-making (including managing child health appointments). The reach of female authorities must also be considered in the context of a 'global religious network,' where young girls can be expected to undertake study in religious seminaries ('sem') between the ages of 17-19 in preparation for marriage, often in Israel or North America. Bruriah highlighted the diverse roles of women when it came to vaccination:

It's quite straightforward, my mother in law always said that people who don't immunise have got more dangers of children catching things. I've got a sister who came back from being actually in Israel in sem and one of the *rebbetzin's* [rabbi's wife] talked them all into not having immunisations and how harmful they are for your children. (January 2015)

Birth supporters and breast and infant feeding counsellors were prominent figures around women's health and infant care, and they held considerable status as bearers of 'authoritative knowledge' (Jordan, 1997) in Orthodox and Haredi Jewish communities (Kasstan, 2019). They approached vaccinations in diverse, yet often cautious, ways. Shifra has served as a birth supporter and infant feeding counsellor in Manchester for over twenty years, and advocates for women's needs and provides information across the continuum of ante-natal, labour and postnatal care, including health interventions such as contraception. Vaccinations, however, were an area of infant care that she preferred to avoid:

I don't really try with immunisations. I try to keep out of it, because it's a very sticky subject because I know a lot of the GPs are paid; the way that the GP now gets his funding or her funding is through targets, they've got targets to get to, so part of it is the targets for immunisation. I wouldn't want to take away somebody's, you know, you know, [smiles] salary because I've said that to people. So, I try not to get involved with immunisations. (December 2014)

The political economy of vaccination in England, where GP surgeries are incentivized to achieve high coverage rates, meant that Shifra exempted herself from addressing vaccine-related questions. Doulas that advocated for homeopathic and complementary medicine, as well as natural foods, were more vocal in their opposition and would describe vaccines as 'toxic' and 'dangerous.' Similarly, in Jerusalem, Mrs Segula was deemed by interlocutors to be highly influential in her Jerusalem neighbourhood as the wife of a rabbi (Yiddish, *rebbetzin*) and served as a communal authority in her own right by providing bridal preparation classes and birth support to women in her Orthodox community. Convinced that her own grandson's autism was caused by vaccination, she sought to raise her safety concerns with new parents by the consequences that their decisions carry:

I've been at a couple of thousand births since I became a labour coach in the Orthodox community about 28 years ago. When I'm getting mothers ready to give birth, I'm always recommending whole-heartedly that they should do research on vaccinations and that they should learn about homeopathy, about having a healthy

family. I tell parents they have to live with their decisions for the rest of their lives. (October 2020)

Yet, her unsolicited attempts to caution parents against vaccination were not always welcome. Peninah (24), a young mother of three, said:

She fervently told me not to vaccinate, but that wasn't the route I wanted to go down. I've had friends who have become first time mothers recently, and they're like, "this person has told me that vaccination causes autism, did you vaccinate? And it's this *rebbetzin*, or other people, who are influential like that. (September 2020)

Focusing on (male) religious leaders in health delivery-strategies thus obscures how gendered forms of expertise and authority influence decisions during transitional moments of marriage and childbearing.

3.6 Situated decision-making

While the 'global religious network' of Orthodox and Haredi Judaism offers an exchange of knowledge and practices pertaining to bodily care, vaccine decision-making also reflected the local politics of vaccine governance. The Wakefield Affair in the UK, where the triple-antigen measles, mumps and rubella (MMR) vaccine was controversially associated with autism in a (now retracted) Lancet article, continued to affect decisionmaking in Manchester: Parents are cautious around vaccination and aren't up to date with recent research that shows the MMR is safe, well, *supposed* to be safe. (December 2014 [emphasis added])

While Shifrah (a birth supporter) clearly held her own concerns about the MMR vaccine following the Wakefield Affair, parental concerns of autism were plentiful. Bruriah mentioned, "I've got another sister who's got an autistic child and there was a time when they said it [MMR] could cause different things, so she's not immunised any of her kids." Mothers subsequently reported not feeling able to trust vaccination information offered through the NHS:

Shosha: When Tony Blair was in, and this whole MMR scam, *I don't know if it was a scam*, but this whole scare came up and it really did put me off vaccinations, the MMR in particular. (February 2015 [emphasis added])

This parent draws attention to the initial indecision of the former UK Premier, Tony Blair, to confirm whether his son had received the MMR vaccine – which had a strong impact on public trust and the national debate (Stöckl and Smajdor, 2017), and underscores how 'political immunities' are imbued with disputes over protection. Yet, the situated influences on vaccine decision-making differed in Jerusalem. Parents who accepted vaccinations tended to deliberate over the hepatitis B vaccine, which is given at birth in Israel (but at two-months in the UK), and often decided to delay or selectively refuse. Decisions to delay acceptance were vaccine-specific, "I breastfed and that's one of the reasons I waited a month with the hep B, but aside from that, no" (Miriam, January 2020), and similarly Peninah commented, "I delayed the hep B because I didn't want a newborn to go through that and I'm glad I did delay." Rather than being 'hesitant,'

then, parents were confident about their decisions to delay acceptance of vaccination and disagreed with the routinised state vaccination programme.

Non-vaccination activism was particularly acute in Israel, with messages circulating from Jewish communities in the USA. Two non-vaccination advocacy events were held in Tel Aviv and Jerusalem in November 2019, the latter of which was organised by and for English-speaking Orthodox and Haredi migrants in Jerusalem. The event was an opportunity to understand the internal ways of conceiving of vaccine decision-making as an explicitly "religious" issue, which marks a departure from parental responses in Manchester and reflects a situated discourse of religious liberty in the US (cf. Dubler and Weiner, 2019). Headlining the Jerusalem event was Del Bigtree, a non-vaccination activist in the US, who framed vaccine non-safety messages within a theological discourse. To quote Bigtree's address, 'We know what we're doing. We're allowing our children to be designed in a way that they were meant to be designed. In my mind, they're created in the image of God.'

Participants received English-language information on vaccine non-safety that was imported from the US. All attendees received a copy of the 'Vaccine Safety Handbook: An Informed Parents' Guide,' produced by and for Orthodox Jews in the US as part of an anonymous advocacy group, PEACH (Parents Educating and Advocating for Children's Health). The guide raises suggestions about the implications of vaccination for Jewish law, including vaccines derived from human cell-lines, which is otherwise an issue more commonly associated with Catholicism.

3.7 Claims to religious exemption

While implied in responses to the MMR vaccine (see 3.3), the coronavirus vaccination programme consolidated the discourse of exemption from vaccination as a right to religious freedom – capturing how 'political immunities' marks an *evolving* point of dispute. Mordachai, a Haredi father who moved his wife and three daughters from New York to Jerusalem, raised several concerns surrounding vaccine safety before the pandemic was declared in March 2020, and especially afterwards. The focus on vaccination as a possibly coercive or mandatory public health solution to COVID-19 was unnerving for him, and Mordachai spoke at length with me about his vaccine safety concerns. During the first 'lockdown' enforced over the Jewish holiday of Passover (April 2020), in a very different circumstance to our earlier meetings in synagogues, he said:

I imagine, God forbid, they're just going to try and impose it on people. If there is risk from the vaccine, I don't think it's fair to impose that on people. That actually could be a *halachic* issue, to force somebody to do something that they feel could harm them. That is a religious violation, a pretty clear-cut one I think. (April 2020)

Similarly, Tehillah, was concerned by public health coercion, 'That is one of my fears, that they will, God forbid, enforce some sort of forced vaccination on the population without freedom of choice' (April 2020). Unlike parents who claim a religious identity that they may not actually hold in order to pursue vaccine exemptions (Reich, 2018), these religious parents articulated a religious right to be exempt from vaccinations by over-determining safety concerns.

The act of imposing a vaccine was perceived as a real risk for Tehillah and Mordachai, one that could violate (self-formulated) interpretations of *halachah* regarding how a Jewish body should be governed. Mordachai points to a right to be exempt from compulsory vaccinations on the grounds of inviolable religious freedoms, but to what extent is it appropriate to conceptualise this opposition to vaccination as religious? The question is relevant in relation to jurisdictions that have long maintained vaccine mandates and exceptions – such as the US, from where Mordachai hails. Yet, the question is increasingly applicable to health governance more broadly, as Israel and the UK are two jurisdictions where discussions around vaccine mandates have gained political traction (Kasstan, 2020; Stein-Zamir et al., 2008), and where coercive policies ("green pass" mandatory entry permit) have been implemented or debated to achieve higher coronavirus vaccination coverage rates (Wilf-Miron et al., 2021). Opposition to mandatory vaccine passes have been raised by faith groups more broadly, including a coalition of Christian leaders in the UK who argued that 'disproportionate prevention of the right to worship' would infringe human rights (Vaccine Passport Letter, 2021). Such positions arguably reflect a broader cultural politics of religious freedom, which is being mobilized and deployed toward an everincreasing range of issues (Duber and Weiner, 2019).

Mordachai's concerns (above) are not, however, a new phenomenon. Historians have demonstrated how the 1853 Compulsory Vaccination Act in Britain was met with resistance among religious devotees; smallpox vaccination was perceived as 'unChristian,' and more broadly as an example of 'class legislation' and 'political tyranny' against the working class (Durbach, 2002). The difference with the case at hand, however, is how opposition is voiced in dialogue with the law and hegemonic discourse of religious liberty, where faith is mobilized as an entitlement to exemption and to protect parental or personal choice. In other words, religious 'opposition' and 'exemption' becomes relevant because of medico-legal discourse and provisions, giving rise to what is more appropriately termed 'political immunities.'

4. Discussion

Delving into the discourse of religious exceptionalism and claims to exemption signals that religious law, faith and doctrine are not in themselves central to understanding decisions around vaccination and opposition. By comparing the influences on vaccine decision-making among religious Orthodox Jewish families in Manchester and Jerusalem, it becomes clear how decisions are entangled in scrutiny of science among publics but also religion-state relations and ideas of religious authority and authenticity. There is no blanket opposition to vaccines among the Jewish parents who took part in these studies. Parents that accepted vaccines did not view this area of child health as requiring intervention from rabbinic authorities, and broadly condemned non-vaccination as a transgression of Jewish law. Yet, refusal of vaccines was rooted in a tendency to over-determine and universalize safety concerns, and these concerns became legitimized by drawing on Jewish laws and teachings about risk and danger.

When it comes to biomedical technologies, such as prenatal diagnosis, anthropologists have noted that rabbinic consultation and authority can be liberating for Orthodox and Haredi Jews by shouldering moral labour and lightening 'the heavy weight' of responsibility (Ivry and Teman, 2019). Yet, this paper demonstrates that childhood vaccination can instead prompt parents to negotiate the positions of religious authorities, decide not to consult and even dispute their authority – especially if it had the potential to conflict with their own interpretations of vaccine non-safety. Religious authorities are often viewed by scholars and policy-makers as important players in vaccine delivery-strategies (UNICEF, 2004). Social scientists, too, appear to over-determine the authority and influence of rabbinic authorities in areas of healthcare, and especially contraception (Birenbaum-Carmeli, 2008). However, rabbinic authority is used and sought out in diverse ways when it comes to family-making decisions, such as when to have

children and how many (Taragin-Zeller, in press; Raucher, 2020). Looking beyond the influence of (male) religious authority is essential to understand the decision-making strategies of parents, and to appropriately understand and conceptualise their opposition.

The category of religious beliefs or opposition raises 'sticky' (to borrow Shifrah's term) questions of whose right it is to define opposition as religious, especially given discordances between authorities and devotees on the issue of vaccination. The underlying concern with safety and adverse reactions, which is not specific to these parents, suggests that the issue is not about religious opposition per se. The discourse of religious exemption to vaccines conceals the diverse practices, philosophies and ideas that inform vaccine decisions – of which *halachah* or rabbinic authorities is just one contingent part.

Rather than religious opposition, concern surrounding the ethics, efficacy and safety of biomedical technologies becomes politicized. Taking forward social science conceptualisations of 'political aetiologies' in chronic disease experience (Hamdy, 2008), a model of 'political immunities' can account for how religion is deployed within, and in relation to, the cultural politics of vaccine governance as well the broader governance of religious freedoms. The determinants identified in the case of religiously Orthodox Judaism signal how perceptions of vaccination among minority groups are projected by public healthcare providers, how vaccination becomes a technique of the internal politics of knowledge production, and how decisions are formulated against local forms of vaccine governance.

4.1 Moral opposition and mandates

This study observed how claims of religious exemption to vaccination are being voiced in contexts where coercive vaccination policies have recently been implemented as part of

coronavirus prevention programmes ("green pass"). Recent debates in public health ethics have highlighted how ethnic and religious minorities have experienced disproportionate morbidity and mortality during the coronavirus pandemic, but may be more distrustful of COVID-19 vaccination programmes – as reported in the UK (ONS, 2021; SAGE, 2021). The results of this paper provide insights into how mistrust and safety concerns are interpreted as religious reasons to oppose to vaccine mandates. The ethnographic dataset presented in this paper provides a foundation for social scientists to examine whether public health policies surrounding coronavirus vaccines may serve as an impending flashpoint and propel new claims of religious freedom, and as an evolving manifestation of 'political immunities.'

Social scientists have argued that 'it would be wrong to draw the conclusion that mandating vaccination is always unethical [...] Justifying policies of mandated vaccination requires balancing the health benefit to be achieved against the reduction in liberty and autonomy, and doing so in a way that can be seen to be fair' (Chantler et al., 2019: 269). The coronavirus vaccination programme signals how liberty, autonomy and choice *are* being reduced to expand vaccination coverage in order to afford the dual protection of populations and national economies. While deployment of coronavirus vaccines are raising safety concerns among religious and non-religious people alike, social scientists should tune into the evolving ways that opposition is moralised, legitimised and rationalised. While exemptions on the grounds of religion may be valid for certain vaccines that contain porcine-derived stabilisers (cf. Paterson et al., 2018), religious 'exemption' should not be interpreted as extending to vaccination altogether. Declining vaccination rates and subsequent outbreaks of preventable disease have, in the US, resulted in attempts to limit laws to 'medical exemption' only, which have engendered public pushbacks (Reiss, 2018). Such steps, however, may preempt evolving claims to religious

exemption that depart from faith tenets and to address the problematic binary of il/legitimate social exemptions.

5. Conclusion

Not only is immunity a political project (Esposito, 2015), but 'political immunities' are raising renewed questions about the ethics of protection – in its diverse forms – and the onus is on social scientists to discern how those forms are presented as being in tension. This paper contributes theoretically and empirically to the social study of health decision-making among outbreaks of infectious disease, in which public health interventions confer values of social citizenship (Sobo, 2015) but also engender claims of immunity or 'exemption.'

Looking at existing public health relations with religious groups is essential as coronavirus continues to shape minority responses to vaccination as well as public health perceptions of those minorities. What is consistent between outbreaks of measles and coronavirus is how public health services emphasise religion as being a problem and obstacle to intervention. This tendency is evident in terms such as religious beliefs being a cause of opposition and exemption, and groups being 'hard to reach.' Yet, rather than minority groups being 'hard to reach,' both public health services and self-protective religious minorities appear to be 'hardly listening' when it comes to each other's health expectations. Listening will indeed be crucial as current debates in public health ethics become oriented towards mandating and coercing coronavirus vaccines, and grappling with the dilemma of what constitutes legitimate exemption.

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