

Chapter 4

IMMUNITIES AND IMMUNISATIONS

Mrs Kahn, a Haredi (Litvish) mother of nine, told me the reasons why she chose to delay acceptance of the recommended NHS childhood vaccination schedule for her first six children. In her words, 'I was never comfortable with it being so early. They were very little. They had immunity from me because I was breastfeeding, so I wasn't in a hurry'. When Mrs Kahn decided to accept vaccinations for her sixth child, she was distressed by his reaction to the diphtheria, whooping cough and tetanus vaccine (DPT)¹:

I was warned 'he might have a temperature, keep him on Paracetamol overnight'. 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 and months. He was inconsolable and had this weird high-pitched cry for days, and days, and days, and he had a temperature on and off for days. I was a bit freaked out by it to be honest and I think 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.

Mrs Kahn subsequently declined all vaccinations for her seventh child – much to the frustration of her local GP who tried to convince her that complying with the recommended NHS vaccination schedule was important to protect the health of her newborn baby as well as the local population. Mrs Kahn described the pressure and duress she felt to vaccinate, whilst at the same time she doubted the public

health claims of population-level protection that were put forward to influence her decision-making:

I'd been scared by the doctor who said 'you need to give [vaccinations], 'coz if a child gets whopping cough, it's terrible and newborns who get whooping cough, it's life threatening, it could be fatal, and if you don't vaccinate then we're not going to have herd immunity' and really using the hard sell to try and get me to vaccinate. I brought this eight-week-old child in for its check-up, and he wasn't very well, he was full of cold and he had this horrible cough, and they still wanted to vaccinate. Now one of the things I'd read was that you only give a child who is in good health a vaccine, and he was still pushing to give it though he was poorly. So I said, 'no I might do it, I'm still not convinced, but I'm not gonna immunise if he's not well'. Anyway he got worse and worse and I took him to the hospital. He had whooping cough. So even if I had wanted to vaccinate him at eight weeks old, he wasn't well enough. And he had whooping cough already, so herd immunity hadn't worked anyway – this whole fallacy.

Unsettled by this experience, Mrs Kahn subsequently viewed NHS health information around vaccinations with mistrust and withheld vaccinations for her eighth and ninth children. When I asked whether she also drew on Judaic teachings 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'.

Mrs Kahn's experience around childhood vaccinations gets to the heart of this chapter on how perceptions of immunity and immunisations influence vaccine decision-making among Jewish parents in Manchester. Low uptake of childhood vaccinations appears to be one of the main reasons why Haredi Jews are portrayed as being 'hard to reach' in public health discourse, and their 'non-compliance' with routine childhood vaccination schedules is often attributed to 'culture' or religious 'belief'. Some parental responses to vaccinations reflect a broader preference to negotiate maternity care and child health services due to opposing interpretations of bodily protection – as put forward by the Haredim and public health authority. Yet parents in Jewish Manchester hold diverse standpoints on vaccinations that range from outright refusal to cautious, selective, delayed and complete acceptance, which illustrates how there is no blanket culture of opposition to childhood vaccinations (as the 'hard to reach' accusation implies).

Whilst vaccines are one of the most effective public health interventions available to prevent and arrest the transmission of certain infectious diseases, ‘compliance’ with vaccination campaigns in the UK has been undermined by safety concerns and mistrust in government recommendations. Parents across the UK are known to negotiate acceptance of childhood vaccinations, which resonates with the broader experience of *frum* parents in Manchester and suggests that entire ‘ultra-Orthodox Jewish communities’ are unfairly stigmatised and targeted for their responses to an area of child health that is commonly viewed as sensitive. Local concerns for vaccine safety should therefore be viewed in the context of Haredi Jews being a minority group in the UK.

This chapter explores childhood vaccinations through three main pathways: firstly by discussing ‘immunity’ as a social construction, then by juxtaposing a brief historical account of how émigré and poor Jews were the target of vaccination policies during the nineteenth and twentieth centuries alongside current representations of the Haredim as being ‘hard to reach’, and finally moving on to frame the views and concerns surrounding vaccinations in Jewish Manchester today.

Social Immunities

The NHS childhood vaccination schedule (detailed in Appendix) is a state-funded programme that requires consistent engagement until children reach pre-school age, around three-to-four years old. Government sanctioned vaccination campaigns are ‘political projects’ to immunise the body of the nation, demanding a state of ‘compliance’ that is not always volunteered willingly by the intended targets of public health interventions (Greenough, Blume and Holmberg 2018). A public health philosophy can conceive vaccinations as an obligation – a *gift* to preserve life – that must continuously be circulated without disruption between individuals in order to protect the population (through the mechanism of social immunity).² Parents who decide to exempt their children from the citizenly responsibility to accept childhood vaccinations according to NHS schedule are dispersed across the state, as variation in UK vaccination coverage rates imply. Yet it is seemingly the case that Haredi Jews are singled out for low-level uptake perhaps because they are identified (and identifiable) as a target for intervention. In so doing, a social history saga continues to frame Jewish minorities

as being disruptive to the body of the nation's health (Introduction, Chapter Two).

The Haredi social body is maintained by a preference for self-protection and a pursuit of *immunity* from the external world – an exemption that preserves its own social life, but has implications for how healthcare services are used. The strategies of self-protection and immunitary reactions employed by the Haredim demonstrate how, as Haraway has argued, 'the immune system is a plan for meaningful action to construct and maintain the boundaries for what may count as self and other in the crucial realms of the normal and the pathological' (1991: 204). The representation of Haredi Jews as being 'hard to reach' and 'non-compliant' with the citizenly ideals propagated by the state evokes a historically contiguous issue of how the Jewish social body is positioned vis-à-vis the body of the nation, and how they position themselves.

'Social immunity' describes the threshold of a population that must be immunised in order to arrest and resist the transmission of vaccine-preventable diseases (VPDs).³ If a certain proportion of a population are vaccinated against an infectious disease, protection *may* be afforded to susceptible and vulnerable bodies who cannot be vaccinated for reasons of medical exemption (such as foetuses, newly-born babies and pregnant women) – thus offering a degree of protection to the body of the nation. However, the protection that would be afforded to individuals with medical exemptions through social immunity is left vulnerable if threshold levels of vaccination coverage are not maintained.⁴ Thus the logic of social immunity rests on the continued uptake of vaccines, especially those routinely recommended during childhood.

Statistics of national vaccination rates are not an accurate indicator of social immunity at local levels, largely because vaccination coverage is not spread evenly across the entire UK population and has varied significantly in recent years.⁵ The threshold level of the immunised population in relation to the non-immunised is, in reality, not static, but constantly shifts with the movement of individuals.

Common conceptual references for social immunity include 'herd immunity', 'health protection target', and 'community immunity', the latter of which emphasises the human value of protecting vulnerable groups in a shared environment.⁶ However, 'community immunity' conflicts with my aim of problematising the use of 'community' in public health discourse because of the idealised or imagined participation that this term implies, particularly as *from*

Jews do not share a common standpoint on vaccinations and would not always ‘comply’ with the views of rabbinical authorities when it comes to uptake of vaccinations (discussed in this chapter). The term ‘community immunity’ is also at risk of obscuring how the UK population does not share a homogeneous view on vaccinations (as regional variation in coverage rates might suggest). For these reasons I instead advocate the term ‘social immunity’⁷ as an attempt to realign the public health language with the socio-cultural context in which health conducts and interventions are always embedded and entangled within.

It is in this conceptual perspective that the complex and antonymic relation between *immunitas* and *communitas* (Esposito 2015) can be applied to the social tensions of individual and public bodily protection within which vaccinations are embedded. At the heart of understanding the relation between immunity and the ‘community’ is the Latin etymological root of *munus*, which denotes an obligation or gift that must be repaid. In other words, it is a contractual obligation. The power of *communitas* lies in its construction ‘around an absent gift, one that members of community cannot keep for themselves’ (Campbell 2008: X).

Whereas *communitas* marks those ‘who support it [the obligation] by being its bearers’, *immunitas* is the privilege of exemption and is fundamentally a state of ‘difference from the condition of others’ (Esposito 2015: 6). The crux of *communitas*, or being inside the ‘community’, is to be bound by an obligation (*munus*). To be immune is not only to be relieved of the *munus* and be placed ‘outside the community’, but also to *disrupt* the social circuit itself (2015: 6). By relieving oneself of an obligation ‘and placing himself or herself outside the community ... they become constitutionally “ungrateful”’ (2015: 6) – or what public health discourse would describe as ‘non-compliant’ in the context of opposition to vaccines and the subsequent interruption to social immunity levels.

The antonymic relation between *communitas* and *immunitas*, as Esposito argues, ‘can happen in mutually opposing forms that bring into play the very meaning of biopolitics: either the self-destructive revolt of immunity against itself or an opening to its converse, community’ (2015: 141). Whilst Esposito argues this in relation to the body of the nation, it is my view that the phenomenon can also be observed from the perspective of the Haredim. For Haredi Jews, the resolute and increasingly stringent pursuit of *immunity* and protection results in a vulnerability that can have the potential for the social body to be threatened from within (Chapter Two). What is

common to these antonymic instances of preserving the lifeblood of the state and the social body is a need to identify and target the location in which contagions manifest – the border between what is positioned as internal and external, or perhaps purity and danger (cf. Esposito 2015; Douglas 2002).

Framing Opposition

Vaccination hesitations and oppositions cannot be understood as a universal phenomenon and should instead be viewed as part of broader socio-cultural conceptualisations of the body and immunities.⁸ Objections to vaccinations are all too often reduced to a ‘lack of knowledge’, ‘cultural factors’, or ‘religious beliefs’ in public health discourse, yet little attempt is made to describe what these ‘beliefs’ actually entail or the processes in which they are formulated.⁹ This tendency to gloss over opposition to immunisations raises the question of whether such ‘beliefs’ happen to be held by religious people, or whether they are based on cosmological interpretations that are propagated by religious practitioners. How religion becomes a reason and rationale for religious individuals to *not* vaccinate is rarely discussed (Hobson-West 2003).¹⁰ A resolve of this chapter is to illustrate how *frum* Jews navigate the process of deciding to immunise or *not*, and how vaccine decision-making strategies are shaped in relation to the Haredi lifeworld.

A ‘belief’ implies that perceptions of health and the body are malleable and not based on authoritative knowledge, when health conducts are instead grounded in a worldview or ‘cosmology’ (as the Haredim demonstrate). Moreover, culture or ‘cultural resistance’ is often positioned as a barrier to biomedical interventions and thus the emphasis is placed on the target group alone – also sweeping aside the structural, socio-economic, or socio-political constraints at play (Fassin 2001; see also Parker and Harper 2006). Cultural reductionism in public health discourse positions ‘*the culture of the Other insofar as it is different*’ without attention to what might be similar (Fassin 2001: 300 [emphasis in original]). Positioning culture as the target of intervention obscures how safety concerns held by parents in Jewish Manchester can factor strongly in responses to public health interventions (which are not exclusive to Haredi Jews).

Vaccine hesitations can be intimately tied to socio-political relations between the state and minority groups, particularly when the latter fear being the targets of contraceptive control, virulent pandemics, or unsafe global public health interventions (Renne

2018: 301).¹¹ Global concerns that vaccinations are, for example, used to control population size are often positioned as ‘unusual theories’ or dismissed as ‘conspiratorial claims’ in need of defusing (Davies, Chapman, and Leask 2002: 24; Kata 2010: 1712–1713). However, relegating vaccine hesitancies to the realm of ‘unusual theories’ or ‘conspiratorial claims’ points to a broader issue of how the concerns held by the intended beneficiaries of vaccination campaigns are handled and addressed by global public health bodies, which is necessary to promote and protect public trust in immunisations.

Compliance and Coercion over Time

Juxtaposing archival and ethnographic material demonstrates how compliance with vaccination policies (to increase uptake) has been cultivated over time, firstly among émigré Jews, and now among the Haredim. Looking at vaccination practices across historically-situated lifeworlds also generates an important discussion on engaging minority groups with vaccination campaigns and how responses (which are not in the manner of ‘compliance’) should be interpreted. Public health formed part of a historical strategy to assimilate difference (Chapter Two), and émigré Jews during the nineteenth and early twentieth centuries were coerced into accepting vaccinations against smallpox by the established and anglicised Jewish social body.

Smallpox was a reoccurring threat during the nineteenth century, and the Medical Officer employed by the Jewish Board in Manchester implemented rigid and ‘proper’ childhood vaccination policies to counteract the risk of exposure in the Jewish slum areas and neighbourhoods. It was the view of the Medical Officer at the time that his enforced vaccination policies led to the ‘exemption [of the Jewish poor] from this fatal disease’ – probably by granting collective protection through social immunity.¹² The Board consequently did not have to report incidences of smallpox contagion to the local authorities due to the absence of infectious outbreaks in the Jewish neighbourhoods.¹³ When attempting to enforce a state of ‘compliance’ with health interventions amongst the Jewish poor, the Board would use its economic relief as leverage when implementing vaccination and re-vaccination policies.¹⁴ Policies of coercion were associated with epidemics and outbreaks of smallpox, and in 1876 the Board warned that aid and the provisions of religious

imperatives such as *matsos*¹⁵ would ‘be absolutely stopped’ in all cases of ‘non-compliance’.¹⁶ Thus émigré and poor Jews who were ‘non-compliant’, or who sought exemption from the obligation to be immunised, were threatened with exclusion from important sources of culturally specific welfare support.

The Jews’ School on Derby Street was an institution not only of education but ‘powerful assimilatory pressures’, where speaking Yiddish was a punishable offence in the classroom as well as the playground (Williams 1976: 295; Null 2007). Children attending the school in 1878 were examined for evidence of vaccination or those performed ‘imperfectly’ – defined by ‘having less than two good marks’ – as the body proved its compliance with public health orders. Moreover, the Jewish school, situated in the heart of the slums, worked in collaboration with the Board to implement blanket vaccination strategies. In fact, teachers provided the Board with the names and addresses of pupils whose parents were thought likely to apply for assistance, ‘so that pressure may be put on such parents to have them [children] vaccinated when not already so, – or revaccinated where the vaccination is only imperfect’.¹⁷ Access to essential relief for the Jewish poor therefore became dependent on compliance and submission to the dominant Jewish body as a proxy of the state.

Foucault’s theoretical paradigm of ‘governmentality’ can be used to analyse the attempts of authoritative Jewish institutions to coerce ‘alien’ Jews into complying with vaccination policies against smallpox. Forced vaccination policies can be situated as part of a historical pursuit of capitalism, within which modern preventive medicine was cultivated as a technique of subtle subjugation – epitomised by the term ‘intervention’ (rather than ‘service’). Compulsory vaccinations programmes can then be interpreted as an imprint of political or economic demands on citizens, and featured prominently in colonial campaigns to convert local populations into ‘governable subjects’ and thus control their economic production.¹⁸ Vaccinations form part of the state’s apparatus to survey and control its subjects, but ‘state authority and power in implementing public health measures is all the more amplified when it is applied to marginalised populations, often consisting of ethnic minorities and migrants’ (Davidovitch 2013: 151). When ‘alien’ and ‘foreign’ bodies are pathologised as a potential biological risk to the body of the nation, public health interventions are deployed as an immunitary reaction to assimilate difference (cf. Esposito 2015; Chapter Two).¹⁹

'Non-compliant Communities'

The historical attempts to coerce émigré and poor Jews into 'complying' with vaccination policies is contiguous with current representations of Haredi Jews in public health discourse as 'hard to reach', and the target of intervention for the protection of all. Low-level vaccination coverage among certain Haredi neighbourhoods in North London has resulted in persistent outbreaks of VPDs (Public Health England 2016). Low-level vaccination coverage within 'hard to reach' or under-served 'communities' (such as the Haredim) is not only framed as a national concern for Public Health England, but also 'threatens to jeopardise progress towards disease elimination and allow VPDs to re-emerge in the European Region' (Public Health England 2016: 6).²⁰

Over the past decade recurring outbreaks of measles in the European region (as a hindrance to overall control) have been linked to low vaccination coverage in the 'Orthodox Jewish community' or 'extremely ultra-Orthodox groups' who are portrayed as 'sectarian', 'specific sub-populations', or 'non-compliant communities'.²¹ A strategy of European public health bodies has been to consequently identify and target specific areas and populations who remain 'at risk for measles' (read: those with low vaccination coverage) and to tailor health information and preventive services accordingly (Steffens, Martin and Lopalco 2010). The overall objective is to increase 'compliance', which resonates with claims that consider public health surveillance as an opportunity to control and contain populations as much as infectious diseases (Foucault 2006; Briggs 2003).²²

Following this line of enquiry, the UK's Orthodox and Haredi Jewish populations can then be framed as a *specific* group targeted for intervention because of low vaccination coverage – despite considerable variation at the national level. Put together as the 'ultra-Orthodox Jewish community', Haredi minorities can be viewed as a threat to ambitions of measles elimination held by Public Health England (also hindering its responsibility to contribute to the protection of the European 'community'). Constructing an image of the 'ultra-Orthodox Jewish community' as one that is 'hard to reach' has the side effect of explicit stigmatisation, particularly as the safety concerns and hesitancies held by some Haredi mothers in Manchester are similar to those observed in the broader UK population.

Prevailing representations of Haredi Jews in public health discourse can be embedded in a deeper discussion of the attempts made

by minority groups to settle at the resistive margins of the state, which become justified sites of 'intervention'. The language used to frame Haredi Jews and the consequent ingress of public health epitomises how power is exercised not only across territories but also on the bodies and 'the subjects who inhabit it' (Foucault 2006: 135). Thus vaccinations can be read as leaving a mark of intersecting powers on the body and imprints of the custodianship sought by socio-religious, political as well as biomedical authorities over individuals. The Haredi population is emblematic of this contest, for whom the preference to be self-protective is a preventive measure against external influences that are viewed as being a virulent threat to the established socio-religious order. It then becomes clear how vaccinations and public health interventions point to a strong conceptual reference in a minority such as this, for whom maintaining a sense of social *immunity* from the outside is paramount to collective endurance and survival. Attempts by the public health authority to improve coverage should therefore be handled sensitively, but are arguably (and evidently) not.

In order for public health authorities to target Haredi minorities they must first be constructed and represented (or re-presented) as a 'community' in need of intervention or protection, and then 'reached' through tailored information and services (Figure 4.1). Some preventive health programmes can actually *misrepresent* the Haredi minority, which indicates a conflict between how the Haredim are viewed by public health campaigns and how they view themselves (Chapter Two). The way in which public health discourse constructs target populations can equally mean that 'differences between populations in terms of their relationship to the circulation of health-related information can be crucial determinants of their citizenship status – at the same time that it shapes understandings of the state and state power' (Briggs 2003: 292). Public health, as an institution of the state, can therefore be seen as strategic to formulating and circulating ideals of citizenship through its discourse, with the targeted group then assimilating these citizenly responsibilities into their daily lives. When studies and public health discourse constructs the 'ultra Orthodox Jewish community' as an 'at risk', 'underserved' or 'hard to reach' population, intervention is legitimised and paves the way for the ingress of public health and the incorporation of minority groups into the nation.²³

The right of an individual to receive routine and recommended childhood vaccinations is enshrined in the NHS Constitution (2015), which can be read as a gift from the state that is returned



FIGURE 4.1 Translated information leaflets for Haredi families in North London. © The Queen's Nursing Institute. Published with permission.

or repaid by immunising the body of the nation. Strategies to encourage acceptance of vaccinations in the UK are (in theory) persuasive, as there are no formal laws or punitive measures which force parents to immunise their children.²⁴ In this sense, the health authority attempts to convince the public body of the need for vaccinations as a technique to govern and protect their own health as well as the health of the nation.²⁵ Parents are nonetheless encouraged and expected to 'comply' with routine vaccination schedules (Hobson-West 2003), leading to social expectations to conform with norms of 'responsible' and 'good' parenting. Parents who 'deviate' from recommended child health guidelines are consequently represented as fuelling the increasing incidences of vaccine-preventable diseases (see Conis 2015), or as Esposito (2015: 6) might say, they disrupt the 'social circuit of reciprocal gift-giving' (social immunity).

Parental Perspectives on Vaccinations

Past studies of primary care coverage in Haredi settlements report conflicting responses to vaccinations, indicating how representations of Haredi Jews in public health literature should be viewed with a critical lens.²⁶ Whereas many studies claim that there is a lower than average uptake or coverage of vaccinations among Haredi Jews, there are past counter-narratives which detail how there are no significant differences when compared with neighbouring non-Jewish populations.²⁷ It has been argued that English health authorities possess a misconceived (and perhaps inaccurate) understanding of the views of Haredi Jews with respect to preventive health services (Cunninghame, Charlton and Jenkins 1994).²⁸ How Haredi Jews *actually* respond to vaccination campaigns can conflict with the way in which public health authorities *imagine* them to fear immunisations.²⁹ Haredi minorities are arguably singled out unfairly for low uptake in public health discourse, particularly as vaccination coverage varies significantly across the UK.

The reasons that apparently underlie low-level acceptance of vaccinations amongst the Haredim also remain unclear and conflicting. Infectious outbreaks are recorded (or portrayed) as spreading like 'wildfire' in Haredi settlements, largely because of family sizes, under-immunised child populations, domestic overcrowding and the international network that comprises the so-called Jewish 'community'. Public health authorities have remarked on the association

between large family sizes and the likelihood of multiple non-vaccinated children in Israel as well as Jewish London (Ashmore et al. 2007; Muhsen et al. 2012), but other studies in London have instead claimed that large family sizes are not implicated in the immunisation practices of Haredi Jewish mothers (Henderson, Millett and Thorogood 2008).

International travel between Haredi settlements is associated with the importation and exportation (or transmission risk) of infectious disease in public health discourse.³⁰ Yet this is a claim that is recurrent over time considering the use of ‘quarantine as a medical rationale to isolate and stigmatise social groups reviled for other reasons’ (Markel 1997: 4), such as émigré Jews to the United States. Public health bodies compare and make inferences between outbreaks of infectious diseases or low immunisation coverage in Jewish London with other Haredi contexts in Europe, the United States, as well as Israel (see, for instance, Anis et al. 2009; Muhsen et al. 2012). However, public health discourse should not misconstrue Haredi Jews as belonging to a global ‘community’ that is either monolithic or a monocultural, instead, outbreaks as well as vaccine hesitations should be analysed in each individual context.³¹

Blanket claims that Haredi Jews respond to vaccination campaigns with low-levels of ‘compliance’ shields the multiplicity of views surrounding immunisations held by parents, as is shown by responses in Jewish Manchester. Vaccinations are not forbidden under *halachic* law (Loewenthal and Bradley 1996: 224), and there were attempts by some rabbinical authorities to promote them as a means of protecting infant health (based on their interpretations of the Judaic cosmology). Promotion of vaccinations by public health officials or certain Haredi-led initiatives within Jewish Manchester took various forms, and were sometimes circulated by specific Haredi institutions or underlined by making references to authoritative personnel. One example is a culturally specific health periodical, ‘*Zei Gezunt*’, which collates and selectively screens public health messages from the wider biomedical and therapeutic network for distribution to approximately 2,700 Jewish homes.³² The periodical was used to raise the profile of vaccinations following the 2014–2015 multi-state outbreak of measles in the United States, endorsed with the views of rabbinical authorities. Of particular interest are the ways in which preventive health messages are made relevant to Haredi worldviews by drawing on the authoritative knowledge of *poskim* – arbiters of *halachic* law in cases where a situation or dilemma is ambiguous, contentious or without precedent:

The consensus of most *poskim*³³ is that the vaccination of children to protect them from disease, and that the vaccination of children who can be medically vaccinated, is absolutely the only responsible course of action.

In the absence of a supreme religious authority (such as the Pope and the Roman Catholic Church), the notice asserts the view that *most* (and thus not all) *poskim* advocate that vaccinations are a kosher preventive measure. Claiming that parents have a responsibility to accept vaccinations based on the judgements of *poskim* suggests that hesitancies surrounding vaccine uptake are related directly to issues of *halachic* permissibility, when Jewish parents engage in vaccine decision-making through a range of influences and considerations.³⁴ Whilst some vaccine-hesitant parents would indeed obtain a *psak halachah* (judgement of law), others did not see this as a necessary course of action – especially if it would have the potential to conflict with their own interpretations of vaccine safety.

Although the *Zei Gezunt* advertisement is broadcast directly to the settlement through an established channel, other sources of authoritative knowledge were dispersed through more international as well as peripheral lines of communication (Figure 4.2).³⁵ The missionary strategies employed by Chabad Lubavitch in Jewish Manchester is one example, with immunisations referenced positively in a weekly publication that is freely delivered to local homes.³⁶ One edition of the circular raised the issue of immunisation for the purpose of travelling to Israel, which made clear and offered reassurance that vaccines are safe and should not be a source of anxiety.³⁷ Through this circular it would seem that immunisations are viewed favourably and without risk amongst the Chabad movement. However, this positive view of immunisations may not be upheld by individual followers and it is worth reiterating that despite the prominence that Chabad enjoys as a Haredi Jewish outreach service, they are just one of many Haredi groups. The internal diversity of Jewish Manchester means that the dissemination of pro-immunisation messages by some authorities or circuits of authoritative information may not resonate amongst others.

The view that Jews are mandated to preserve their health and body (Chapter Two) was mobilised to justify uptake of vaccinations as a parental responsibility. Mrs Tananbaum, a *frum* mother of four, explained that, '*halachically*, one should do everything in their power to put themselves in a good position to protect themselves. Because you're supposed to live Torah, not die. If you're dead, you can't do

any of the Torah *mitzvos* [commandments]'. In this view, vaccinations are (or should be) sanctioned as they enable Jews to maintain their health, and fulfil religious commandments. Mrs Tananbaum interpreted vaccinations as being an imperative conduct, and part of the social contract between the Jews and their Divine authority:

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. At the end of the day, God forbid something happens, who are you going to blame, God? You can blame God but He put you in the world, and if He gave you facilities to protect your child, you should, to save a life.³⁸

Vaccines are then conceived as being bestowed by God as a protective mechanism to preserve life (*pikuach nefesh*). The claim that vaccinations enable Haredi Jews to observe the obligation (*mitzvah*) of preserving the body is consistent with broader ideas of health and the body in the Judaic cosmology and coheres with the view of a local Haredi (Litvish) rabbi I met. In the context of nutrition and preventive health, he told me that:

The vehicle for all of this [performing *mitzvot*] is our body. Yes, we are here to attain the world to come by doing *mitzvot*, but we are not spiritual souls, spiritual souls would be the equivalent of angels who don't have bodies. We are not angels. We are here in bodies. The *mitzvot* you actually do with your body, and if your body is not healthy, well you just aren't going to be as able or energetic or as well to do the *mitzvot* that you should be doing. (Rabbi Raphael)

It is equally the case that there is no authoritative ruling in the Judaic cosmology to proclaim that vaccinations are compulsory. Rather than opposition to vaccines being an issue of 'culture' or religious 'beliefs', anxieties and responses to vaccines emerged as a fraught area of childhood and child health for Haredi parents that needs to be carefully and continuously negotiated. Religious teachings were, for instance, interpreted as a reason *not* to immunise by Mrs Lisky, a local Hassidish mother. She drew on a Talmudic decree to underline her decision to decline the further course of routine vaccinations that her daughter was offered:

Mrs Lisky: In the *Gemarah* it says that it is worse to do something dangerous than to do something which is forbidden.

BK: What do you mean by that?

Mrs Lisky: It comes from a fear 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 it is possible that punishment is allowed for danger and that is even worse than something that is forbidden.

The decision Mrs Lisky made to not vaccinate her daughter is therefore situated in relation to her own legal interpretations of how the body and soul is governed in Judaism. Even though vaccinations are *halachically* permissible and not forbidden, the danger that she perceived them to hold would consequently put her at risk of Divine punishment exceeding that of a *halachic* transgression. Child health appears to be highly prized and protected, requiring negotiation as well as intervention in ways that parents can view as antonymic to public health philosophies (similar to areas of maternity care, see Chapter Three). The decisions that some Haredi parents formulate might then involve a sensitive process of juxtaposing the danger against the *halachic* permissibility of biomedical technologies; also demonstrating how religious scriptures are interpreted by individuals and applied to suit healthcare-related encounters.

These examples illustrate how Jewish legal frameworks offer plural and opposing interpretations for parents deciding whether to vaccinate or object to vaccinations, yet each might be seen as taking a ‘leap of faith’ from the other’s perspective. Studies that cite religious rationales or ‘beliefs’ for objecting to vaccinations often fail to clarify what these actually entail, and the case of Jewish Manchester demonstrates the complexities for Haredi Jewish parents when consulting Judaic teachings to inform healthcare-related decisions.

Maternity carers held a range of opinions on how vaccines were viewed in Jewish Manchester, with some claiming that the ‘Haredi community do not believe in giving immunisations until a bit later on’ – rather than this being an issue of outright refusal. The number of Haredi parents who actively refused vaccinations was apparently a ‘very small percentage’ of Jewish Manchester (Mrs Cohen). Many of the midwives and doulas told me that providing vaccine information did not fall in their remit, and this was instead viewed as the responsibility of a local Haredi-run family and child welfare centre.³⁹ One doula made a conscious decision to avoid promoting vaccines in her maternity care work, partly because she viewed immunisations as a responsibility for GP surgeries but also because this particular biomedical intervention is entangled with broader political and economic relations:

I don't really try with immunisations. I try to keep out of it, because it's a very sticky subject. I know a lot of 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 [of what] I've said to people. So I try not to get involved with immunisations ... it's a bit more sticky, and it's medical, so I really would try to keep out of that. (Mrs Susman)

Mrs Susman actively refused to interfere with the issue of promoting vaccinations, which she viewed as an invasion into a terrain of medical jurisdiction or perhaps an area that her infant care work reluctantly overlaps with. Mrs Susman does, however, recognise the possible implications of her advice: if her guidance should conflict with that provided by medical professionals, they would then incur a financial penalty due to lower than anticipated immunisation coverage.

GP surgeries in England have financial incentives to meet childhood immunisations targets, which complicates the relationship between healthcare professionals and patients. Similar to other areas of preventive healthcare, this creates a situation where healthcare professionals are under pressure to improve the uptake of 'interventions' (such as cervical screening) in order to achieve coverage targets that are tied to financial reward or remuneration (see Berjon-Aparicio 2007). Provision of immunisations in primary care then presents particular 'side-effects', given that advice from general practitioners is viewed as partial or untrustworthy by parents because of their institutionalised financial incentives to immunise children (see Petts and Niemeyer 2004; Poltorak et al. 2005).

NHS GP surgeries in England have previously deployed conscious strategies to avoid financial penalty by manipulating vaccination coverage levels. Tactics have included the temporary exclusion of children from patient registers if their parents object to immunisations – by removing these children from immunisation target groups, they would thereby also be excluded from calculations of uptake levels and present the illusion that immunisation coverage is higher than it actually is (Scanlon 2002). The manipulation of statistics to create the illusion of higher coverage levels for the purpose of securing economic incentives offers a backdrop to understanding why some maternity carers may be hesitant to promote vaccines (which in some cases they appear to lack confidence in). It is therefore worth critically engaging with the statistics that are deployed as authoritative knowledge in public health discourse – or

the *culture* in which authoritative knowledge is constructed – to represent vaccination coverage, especially when seeking to understand the dynamics of vaccine hesitancy. Against the political and economic context within which vaccines are delivered, maternity carers like Mrs Susman felt they had good reason not to actively circulate pro-immunisation advice.

Vaccine hesitancies held by parents in Jewish Manchester usually centred around the fabricated and long-refuted claims that the triple-antigen measles, mumps and rubella (MMR) immunisation may be causally associated with autism (Wakefield et al. 1998). Mrs Susman considered this a lingering anxiety in Jewish Manchester because of the prominent place that the alleged dangers of the MMR immunisation once held in the public domain, which:

Petered through the system to the Jewish community, but they're not up to date with it. They're still maybe ten years behind with what has gone on with the MMR. They're not up to date with the recent research that shows that MMRs are safe, well, *supposed* to be safe. (Emphasis added)

Although Mrs Susman notes that Jewish Manchester is not up to date with recently published research, this is not to say that public debates about health do not 'reach' the constituency at all. Advice and authoritative knowledge that is intended to counter vaccine hesitancies certainly do circulate through information sources that are viewed as approved and authoritative (such as *Zei Gezunt*, but also Haredi newspapers and lifestyle magazines, as well as independent Internet research). Mrs Susman appears to doubt the safety of the MMR vaccine despite the access she would have to current authoritative knowledge circulated by public health (through her maternity and infant care work). If Haredi Jews in the UK have a residual concern with the MMR vaccine then this should also be viewed in the broader context of their being a minority group in the UK, where reactions to the MMR controversy were widespread.

Some maternity carers also told me that a significant number of local parents continued to be convinced that vaccines were associated with autism and atopic or allergic conditions (such as asthma or eczema) developing in their children. Concerns relating to MMR safety (and the implications for uptake) are not specific to Haredi mothers in the UK, despite the general population not being insulated from flows of information in the mainstream media. Levels of MMR coverage have consistently struggled to reach those attained prior to the 1998 Wakefield affair, often triggering outbreaks of



FIGURE 4.2 Promoting vaccinations in international Haredi newspapers. Photograph by Thomas S.G. Farnetti. © Wellcome Collection. Published with permission.

measles, and the public distrust that underlies lower-level MMR uptake has also shaped responses to subsequent immunisation campaigns (see Stöckl 2010; also Thompson 2009). Lower MMR coverage and the implications for how childhood vaccination campaigns are viewed in England then suggests that the self-protective stance of the Haredim (which, according to Mrs Susman, makes them less ‘up to date with the current research’) cannot solely account for mistrust in the MMR amongst *frum* circles.

Negotiating Recommended Childhood Immunisation Schedules

Jewish mothers in Manchester often preferred to accept childhood vaccinations at their own pace rather than follow NHS schedules. Delayed uptake can be read as parents choosing to negotiate acceptance of vaccinations, and illustrates how parental vaccine decision-making is poorly understood when viewed in binary terms of ‘compliance’ and ‘non compliance’.⁴⁰ Blanket representations of low-level of vaccination uptake or ‘compliance’ among Haredi neighbourhoods do not accurately reflect the *process* in which individual parents navigate child health decision-making.

Having a growing family led Mrs Tananbaum to change her views on vaccine acceptance over time as opposed to holding a static position on uptake. She recalled how she was exclusively breastfeeding

and caring for her firstborn son at home (instead of sending him to a communal nursery), which led her to delay uptake of primary vaccinations. Her process of vaccine decision-making later changed when caring for multiple children:

My gut feeling is, 'he's not in nursery, so he's not exposed to other children and I'm still fully breastfeeding him. I think he's protected enough at this moment in time so I want to delay it until her own immune system is strong enough to be able to cope with the vaccines'. Whereas, with my second, I immunised her a bit earlier than my first because I was thinking my eldest is now going to nursery; he's coming home with goodness knows what and exposing it to our newborn. So it [her rationale that underlies vaccine decision-making] changes as the situation changes. Nothing is rigid.

Delayed acceptance of vaccinations must then be understood in relation to broader decision-making strategies surrounding child health and care. Mrs Tananbaum claimed that *frum* mothers delayed uptake because they apparently feared newborns are 'too young at six weeks to get a cocktail of vaccines', with some placing a greater value on exclusive breastfeeding as a conscious strategy of bestowing immune-protection during infancy.⁴¹ Conflicting perceptions of 'protection' can be observed between *frum* mothers and NHS routine immunisations, particularly because preventive health interventions that are designed to guard the broader population by way of social immunity are perceived as potentially virulent to individual bodies. In advancing Esposito's (2015) notion, Haredi women can be understood as claiming exemption from the obligation to vaccinate according to the NHS schedule (and thereby possibly disrupting the protective circuit of social immunity), as an attempt to avoid what they perceive as a disruption to their own children's health and welfare. The view that routine vaccination schedules are a universal technique of protection is therefore not always an interpretation shared between the state and citizens (read: the targets of vaccination campaigns).

Parental assessments of their children's immune systems were common amongst the Haredi mothers I encountered. Mrs Kelner explained that the inclement climate in Manchester meant that she had to carefully decide when to accept childhood vaccinations, and delay uptake when necessary:

Because the weather is so bad here I don't like them to have their jabs when they have a cold or when they are poorly of any sort, and it's really hard to get those months in. *I don't like the idea of giving them*

something that isn't good when their immune system is down a touch.
(Emphasis added)

Mrs Kelner viewed vaccinations as a possibly harmful – rather than protective – intervention, and vaccines had to be balanced against the climatic context of Jewish Manchester to avoid assaulting her children's immune systems. The decisions that these particular Haredi mothers formulate are similar to those observed in the broader UK population, where parents often view their children's immune systems as highly individual and 'at odds with a logic of vaccination among public health institutions premised on homogeneity' (Leach and Fairhead 2007: 46).

Trust in a Time of Conflicting NHS Advice

Past vaccine safety-scares in the UK prompted mothers in Jewish Manchester to cross-examine NHS advice by engaging with broader information sources and social networks. When reflecting on the experience of being a mother during the MMR controversy, Mrs Kelner told me:

I didn't think we were treated fairly as parents. We were given conflicting information even by the government. The NHS didn't seem to know where it stood, and if you can't rely on those who are meant to be giving you the right information then what do you do? What do you base your judgement on?

BK: Does this affect the way you see NHS health information?

Mrs Kelner: In general no, when it comes to immunisations yes. I won't take it as written in stone, definitely not. I will chat it through with people or look it up online.

The perception that the NHS had allegedly failed to reassure parents during the MMR scandal has had the implication of breeding a continued mistrust in government recommendations concerning vaccinations, pushing Haredi parents such as Mrs Kelner to scrutinise health recommendations. Mrs Kelner's claim that the NHS and healthcare professionals were previously ambiguous in their position on MMR safety reflects the views of parents in England more broadly (Petts and Niemeyer 2004: 12).⁴² Any evaluation of how Haredi Jews respond to vaccination campaigns should then consider their status as a minority group in the UK, which shapes both their trust in the state and its health authority.

The decision to 'give' vaccinations can involve a process of researching and negotiating the benefits and risks to the individual and social body, the latter of which can be seen to play a

significant role in parental decisions. One Haredi mother described the challenges involved in vaccine decision-making strategies, as the appreciated benefits are counterbalanced by their perceived toxicity:

I think immunisations are extremely *toxic* and it's a very hard decision to know whether to immunise your children or not. I did give them immunisations but I would have preferred not to. I haven't researched this hugely, but I think that they contribute a lot of heavy metal poisoning in the body. Why take a healthy body and inject it with an outside virus? But I know that it can save lives, and I know that if my child caught measles and was exposed to somebody with a compromised immune system then it could kill the person if they caught measles. So it wasn't only for my children it was for the whole community. (Mrs Schmidt, emphasis added)

Mrs Schmidt acknowledged the benefits of childhood vaccinations but accepted her own children's vaccinations reluctantly. Thus 'compliance' with vaccination campaigns does not mean that parents accept them without any concern. The hesitation of this mother to vaccinate her child again echoes findings from the broader UK population, for whom consenting to vaccination does not equate with public trust in healthcare and the medical authority (Casiday et al. 2006).

Haredi mothers who delay uptake of vaccinations viewed themselves as employing a deliberate strategy to avoid administering a 'cocktail' of immunisations until their infants are relatively older and perhaps then more able to withstand preventive interventions that have the potential to be 'toxic'. In Mrs Tananbaum's case, this was carefully decided upon through her own analysis of risk and bodily protection. Views that the immune systems of children might not sit in accordance with NHS recommended guidelines are not specific to Jewish Manchester, and these concerns are not an issue of 'culture' or 'religious belief'. The views of these *frum* mothers instead resonate strongly with long-established anthropological debates, wherein 'accepting vaccination means accepting the state's power to impose a particular conception about the body and its immune system – the view developed by medical science' (Martin 1994: 194).

The decision to accept or refuse vaccinations is made by parents and imposed on their infants, the latter of whom bear the implications of contracting a VPD or any adverse reaction that could result in vaccine damage.⁴³ The decision not to vaccinate children is also

understood by parents as putting the social body at undue risk. Childhood vaccinations then become the point where competing risks and responsibilities intersect, entangling the bodies of the individual, the social and that of the nation.⁴⁴

A minority of parents wanted their children to benefit from social immunity without having to vaccinate them, who Mrs Tananbaum described as being 'a little bit of a cheat'. The strength of social immunity rested in the willingness of individuals *to* vaccinate:

A kid might not get meningitis because everyone else around him is vaccinated; they're just jumping on that free boat. Whereas I would question this lady and say, 'if no one else was vaccinated, would you still not vaccinate your kid?' So there's more chance that the child would get meningitis, whereas if everyone is vaccinated it's a very small chance that you would get it. (Mrs Tananbaum)

Ms Meyer was a local mother who defined herself as Orthodox Jewish. She objected to vaccinations for many reasons, and described how high vaccination coverage would (in theory) protect her non-vaccinated child:

If ninety-five per cent of the population is vaccinated that means there's no chance of the disease [circulating] and then therefore the five per cent [that are not vaccinated] are protected anyway. So there's no need for the five per cent to be vaccinated if the majority vaccinate anyway. It's just common sense.

However, Ms Meyer's willingness for her child to rely on social immunity for protection indicates a partial appropriation of biomedical information (authoritative knowledge) when formulating her refusal of vaccinations. Coverage levels, as I discussed earlier, vary from place to place. Some Haredi neighbourhoods in London do not achieve the required threshold to confer social immunity, judging by outbreaks of VPDs (Public Health England 2016). When vaccination coverage is not constant across the country, protection circulates amongst those who are immunised but not those who claim exemption from the social immunity circuit. Whilst individuals like Ms Meyer appropriate biomedical knowledge to inform and justify opposition to childhood vaccinations, it is equally the case that she does not fully consider that her local context might not secure the required threshold of social immunity: the logic that her child might form the protected five per cent only works if vaccinations are accepted by the ninety-five per cent who comprise her neighbourhood.

Toxic Interventions and Adverse Reactions

Anxieties surrounding vaccine toxicity and the risk of bodily contamination informed the opposition of some parents in Jewish Manchester. Mrs Lisky claimed that vaccinations contained animal-derived cells, which she viewed as being a potential reason that her daughter was mute:

My daughter is a bit autistic, she doesn't speak. The paediatrician asked if I was up to date with the immunisations and I said I wasn't giving her the last ones. She asked, 'why not?' So I said, 'I feel the MMR immunisation made her autistic'. She was very angry. They [medical professionals] were all very upset, she and some other people were shouting at me. I said, 'I know for a fact that they make it [immunisations] out of diseased flesh from dogs and cats and rabbits, and then they put it into the body. Not everybody can take dog flesh or aborted flesh; maybe there are sensitive people. Animals can't speak and maybe that's why my daughter can't speak'. (Mrs Lisky)

This Hassidish mother's opposition to vaccinations was embedded with grave concerns about safety and the potential for her daughter's body to not only be contaminated with animal matter – but for her to acquire non-human attributes from the method through which vaccines are cultured.⁴⁵ The possibility for human bodies to be contaminated or damaged by vaccinations that are cultured with animal-derived tissues was a concern for other mothers in Jewish Manchester, and further demonstrates how bodies were seen to need protection and fortification in ways that conflict with the public health philosophy of vaccines.

It is here where we begin to see contests over the guardianship of the body between the Judaic and biomedical cosmologies, the latter of which has been described as producing bodies in a powerful terrain of 'cultural and material authority' (Haraway 1991: 204). Anxieties surrounding the cross-species transfer of tissues demonstrate a permeation of embodied boundaries that is made possible by biomedical interventions. Through adverse reactions,⁴⁶ vaccine-damaged children are viewed as acquiring animal traits or what might be described as conceptualisations of the 'monstrous'.⁴⁷ Biomedical interventions that bring the 'external' into the 'internal' are refused as an attempt to protect and preserve the body in both its physically and socio-culturally constructed boundaries. The notion of 'immunity' then acquires a paradoxical meaning for this Hassidish

mother, as that which is meant to preserve life is counterbalanced by the potential to endanger it (cf. Esposito 2015). Indeed Ms Meyer and her family voiced outright opposition to vaccinations for similar reasons:

Ms Meyer: You're injecting a healthy body with things that come from animals. That's what the injections are, and we're against that for moral reasons, to put that into your child.

BK: What are your main concerns about immunisation safety?

Ms Meyer: First of all its safety for sure, what if [interrupted]

Ms Meyer's parent: It's cowpox, isn't it, vaccinations?

Ms Meyer's sibling: I don't know what the ingredients are but I've heard various things, it comes from monkeys, it's lots of toxic drugs. It's a cocktail of stuff, you know, the ingredients, but yes that's the main priority and then is it actually kosher? I'm not sure that all the ingredients can be kosher.

The cowpox that Ms Meyer's relative had claimed vaccinations were derived from played a historical role in the development of vaccinations against smallpox rather than contemporary ones. These anxieties surrounding the safety status of vaccinations point to a partially appropriated and incomplete knowledge of the intricate process through which these biomedical interventions are produced and cultured.

Viruses for some routine childhood vaccinations are pharmacologically 'incubated' or processed using human or animal cell-lines (Oxford Vaccine Group).⁴⁸ Cell-lines have become a biomedical technique of culturing and immortalising life over short and continued periods of time, where human and animal tissues are extracted and grown independently of bodies for the purpose of mass-reproduction and the development of therapeutic interventions, including immunisations (Landecker 2007; Lock 2007; Lock and Nguyen 2010).⁴⁹ The initial trace of human and animal cell-lines are removed when being 'purified' intensively, which means there is no demonstrated risk of transmitting disease through the manipulation of animal cell-lines for the use of human vaccines. However, ethical issues remain in the fact that human cell-lines are derived from foetuses that were voluntarily aborted in the 1960s but continue to sustain the development of immunisations (see Oxford Vaccine Group 2018).⁵⁰ The concerns of Mrs Lisky should not be dismissed as conspiracy, since at the core of her refusal to not complete the course of childhood vaccinations is a complexly woven debate concerning the pharmaceutical manipulation of foetal and

animal tissues and the moral challenge this has raised for religious practitioners from a range of cosmologies.

Adverse and Averse Reactions

Opposition to vaccines was often described by parents as arising from what they considered to be past experiences of a 'side-effect' or an 'adverse reaction'. Health professionals are, in theory, mandated to log any adverse experiences to vaccinations in patient records.⁵¹ Yet there was a concern amongst Haredi mothers that this does not always occur in practice, which can be viewed as one of the several signs of mistrust in childhood vaccinations and the medical establishment. When recalling her son's adverse reaction to the triple-antigen DPT vaccine, Mrs Kahn described how she felt healthcare professionals handled the situation and her hesitations poorly:

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 [immunise] 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. If you've not recorded him as a vaccine reaction then how can you say the statistics are fair?' (Mrs Kahn)

What is interesting is that Mrs Kahn challenged the view that statistics were an accurate representation of vaccine safety, because she felt that her son's lived experience of an adverse reaction was being excluded from the process of constructing biomedical knowledge (which was presented to her as indisputable). Whilst Mrs Kahn told me how she confronted healthcare professionals on the issue of statistical transparency, other Haredi mothers did not formally report their children's experiences of adverse reactions. Mrs Dreer held particular reservations about the pertussis vaccine despite 'complying' with the recommendation from her GP, but her son subsequently experienced what she interpreted to be an adverse reaction:

Mrs Dreer: I was very nervous about giving the whooping cough vaccine because I've heard stuff, and I said to the doctor, 'should I give it?' He said, 'you'd be a negligent mother if you didn't'. So I gave it, and he was so ill. He had a terrible reaction, *terrible*. I didn't

get any support from the hospital at all. I said this kid is burning up with fever, had ulcers in his mouth. He was dreadfully ill. [Emphasis in interview]

BK: So when you reported it to your [question interrupted]

Mrs Dreer: They weren't bothered, they just said "don't bring him in, he'll just get iller [sic] in hospital."

BK: Did you log the reaction?

Mrs Dreer: No, no. I just told them about it [the reaction], but they weren't interested.

After experiencing what they saw as adverse reactions to routine vaccinations, these Haredi mothers often chose to delay or withhold vaccinations for subsequent children. Mrs Kahn, as mentioned at the beginning of this chapter, withheld all recommended vaccinations for her seventh, eighth and ninth children. Mrs Dreer delayed the age at which her subsequent six children received all recommended vaccines, but selectively excluded the pertussis vaccination.⁵²

Mrs Kahn and Mrs Dreer both felt that healthcare professionals dismissed their concern that adverse reactions had occurred. Mrs Kahn, in particular, felt like healthcare professionals were treating her as a 'paranoid stupid mother who is just being ridiculous'. When I discussed the issue of vaccine safety concerns with a local *frum* GP, I was told that only a small minority were averse to vaccinations and they were allegedly 'just bonkers or people with bonkers ideas'. He went on to remark that parental anxieties could be attributed to 'crazy discredited research or there may be some *meshugenah* [Yiddish, crazy person] in the family who is against immunisations'.

One afternoon I accompanied Mrs Goldsmith as she visited a nearby Hassidish neighbourhood to promote an upcoming ladies' health event arranged by *Gehah* (Chapter Two). When she approached Mrs Lisky with a flyer, the two soon became engaged in an awkward stand off. The Hassidish mother challenged Mrs Goldsmith on the perceived risks of vaccinations, who then responded by asserting the status of her role as a healthcare professional to counter the claims. Meanwhile, I stood nearby not knowing what to do, but seized the opportunity to meet with Mrs Lisky and discuss her anxieties in greater depth.

When we met a few days later, Mrs Lisky expressed her concern with the willingness of healthcare professionals to promote childhood vaccinations without actually being able to explain the process of the vaccine's production. The contradiction she saw subsequently fuelled her mistrust in vaccine safety, but also in the nexus connecting the state, the health authorities and the pharmaceutical industry:

I asked the top paediatrician who has been working here [local hospital] to tell me exactly what was inside injections and she didn't know. All she said was, she was told that it was safe so she knew it was safe. She didn't know it herself. How can you just believe people when you are putting things into tiny babies? It is top *secret* what they put into it. They want to make sure that everybody gets it [immunised] and they get their money. They aren't telling you that it is safe [because] they can't know that it is safe. (Emphasis added)

These Haredi parents viewed vaccinations with suspicion because of conflicting positions on authoritative knowledge and transparency: whilst they accepted the potential for vaccinations to cause adverse reactions and damage to their children, they claimed that physicians did not. The process through which authoritative knowledge concerning vaccine safety is produced and presented to parents underlines this issue of public confidence, as several mothers in Manchester interpreted the information they received with varying degrees of mistrust.⁵³

The safety concerns held by Haredi mothers in Manchester accord strongly with previous explorations of vaccine confidence and trust in the government, as well as medical and public health authorities. A past study conducted in England found that a significant number of parents (who refused the MMR) felt that healthcare professionals were quick to dismiss their anxieties regarding 'side-effects' or adverse reactions, with parents often trusting their own family doctors to take concerns more seriously than the medical establishment as a whole (Casiday et al. 2006: 183). Moreover, as has been explained elsewhere, public confidence in vaccinations is vital to secure sufficient coverage for social immunity, and vaccine hesitations might be alleviated if parents were more aware of the existing processes for surveying the safety of pharmaceuticals and official lines to report adverse reactions (see Casiday and Cox 2006).⁵⁴ Not being seen to record adverse reactions presented by parents can run the risk of fuelling speculation that serious incidences are being 'overlooked, or even worse, covered up by the medical establishment' (Casiday 2007: 1067).

'Power of the Mouth'

Some Haredi locals in Manchester would circulate advice contrary to public health opinions, particularly recommendations to avoid certain vaccinations because of the perceived risks and toxicity. Mrs Lisky told me:

Mrs Lisky: Today I had an argument because somebody went to have a rubella injection and I said to her she shouldn't go.

BK: You advised her not to go for the immunisation?

Mrs Lisky: Yes, because a lot of people who have the rubella immunisation still have low immunity ... and there is a very, very, small risk of having rubella when you are pregnant because most people don't get it and certainly not when you are pregnant. It happens to one in a million people.

Although Mrs Lisky is perhaps correct in alluding to the fact that rubella (also known as German measles) is a rare condition in the UK, the overwhelming reason why rubella is not widely circulated is because of high MMR coverage. Low circulation, however, cannot always be taken for granted because, as mentioned, vaccination coverage varies throughout the UK.⁵⁵ Rubella is a highly contagious viral infection that is relatively mild, but can have serious implications if contracted by a pregnant woman. Vaccinating children against rubella, therefore, has less to do with protecting the body of an individual and more with the body of the nation, and how this is reproduced. Congenital rubella syndrome (CRS) occurs when the infection passes through the placenta to the foetus, and can result in pregnancy loss as well as acute foetal disabilities, especially during the first ten weeks of pregnancy.⁵⁶ Whereas pregnant women are routinely offered a blood test to check for rubella immunity as part of NHS antenatal care (usually at the eight to twelve week stage of gestation), some Hassidish women evade these initial antenatal screening services (Chapter Three).

Vaccine safety concerns are circulated by the 'power of the mouth' in Jewish Manchester, as one participant put it.⁵⁷ Yet vaccination campaigns and public health interventions will not be successful without addressing the anxieties held and shared by intended beneficiaries. The tendency to frame public opposition to preventive interventions, such as vaccinations (measured by low uptake), as arising from 'apathy' or a 'misinformed culture' (such as Oldstone 2010: 9) fails to grasp how antipathy is often rooted in safety anxieties and quests of bodily protection. Vaccine hesitations in the UK more broadly (and their circulation through the 'rumour mill') reveal intense mistrust of government recommendations relating to science and technology, even amongst parents who otherwise cautiously accept vaccinations (see Cassell et al. 2006; Poltorak et al. 2005). Rather than dismissing rumours that are circulated among minority groups, public health authorities should attempt to understand the underlying causes of mistrust and local contentions that

provoke immunisation anxieties, such as those held and proliferated by Mrs Lisky.

Consulting and Circumventing Rabbinical Advice

The importance with which the preservation of health and *pikuach nefesh* is viewed in the Judaic cosmology means that some Haredi parents approach local *rabbonim* with a *shailah* concerning vaccinations,⁵⁸ especially if they have concerns over safety or had previously experienced what they considered to be an adverse reaction (Figure 4.3). Rabbi Levy leads one of the Hassidish constituencies, and locals from across Jewish Manchester (including those who are not Haredi or not observant) solicit his authoritative guidance and rulings. Mrs Kahn regarded him as ‘an extremely holy man’, and described how she approached him with the question of whether to accept vaccinations for her children.

Rabbinical authorities are often consulted in healthcare-related decisions, and their guidance is considered binding (Chapter Two). The particular rabbi who Mrs Kahn approached had apparently said it would be in her interests to consult a *frum* Jewish physician who would still have that ‘health perspective’ to hear and allay their concerns. She then committed herself to acting on his ruling:

I had to take the view that if I’ve gone to ask then I have to abide by what he’s saying. I really do. So I took them [her children], except for the young man who had the reaction [to the pertussis]. I didn’t do [immunise] him then. I was too scared, I really was. So 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. (Mrs Kahn)

The contractual agreement which consulting a rabbinical authority involves, underlined the reason why Ms Meyer was hesitant to solicit an answer on the specific issue of vaccinating her child. Yet she was partial to procuring rabbinical guidance if she could circumvent any obligation to act on the authoritative advice given:

Ms Meyer’s relative: The thing is, if you ask him [the rabbi] a question and you want a *psak halachah* [judgement of rabbinical law] and you’re not going to follow it, there’s no point in asking because if a rabbi did say ‘you have to vaccinate’, we wouldn’t vaccinate. There are lots of issues, well we feel it’s religion too, but we haven’t investigated that as in depth ... as the moral, or the safety. The

issue, you know, we haven't really examined it from the [religious/*halachic*] point of view. There are things permitted in *halachah* that we wouldn't do.

Ms Meyer: I thought about it, but if you ask him and he says, 'you have to', then you really have to follow it through. Don't ask if you can't do it. We could find out what he feels about it 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 way we don't have to do what he says if we don't agree with it. (Emphasis added)

Thus Ms Meyer's inclination to obtain rabbinical advice in a circuitous way indicates how the *rulings* of religious authorities might be less sought after than their *views*, particularly if this is to reinforce their individual oppositions to vaccinations. The family viewed *halachah* and rabbinical authorities only as a possible source of consultation, particularly if this could reinforce their current objections to immunisations.

Previous studies have illustrated that Haredi Jewish women often look for specific qualities in the rabbinical authorities they consult regarding biomedical interventions, such as their being an accurate interpreter of the Torah or *halachich* law (Coleman-Brueckheimer, Spitzer and Koffman 2009). However, it might also be the case that such rabbinical authorities are selected for their potential to be amenable to the concerns presented, and that people might even consciously evade rabbinical figures who hold a contrary opinion.

Media coverage of vaccinations in the UK *Jewish Chronicle* recently pointed to collaborations between Haredi religious and public health authorities, with the former agreeing to endorse immunisations in their constituencies in response to rising incidences of measles (see Kolirin 2017; Winograd 2013). Yet rabbinical endorsement of healthcare delivery strategies does not necessarily mean that Haredi Jews themselves will be convinced of the need to act accordingly (see Coleman-Brueckheimer and Dein 2011).⁵⁹ Public health discourse that represents Haredi Jews as being 'non-compliant', 'resistant' or 'hostile' to preventive health services does not fully account for the complex terrain that religious authorities and parents themselves navigate when dealing with vaccinations. Haredi individuals evidently do not always respond with 'compliance' to the dictates of religious authorities, which underlines my broader argument that Haredi Jews should not be reduced to a monolithic 'ultra-Orthodox community'.⁶⁰



FIGURE 4.3 Authoritative knowledge. Photograph by Thomas S.G. Farnetti © Wellcome Collection. Published with permission.

Discussion

This chapter has critically engaged with the ‘hard to reach’ trope that has been imposed on Haredi Jews, by exploring how immunities are a social construction within which contrasting ideas of bodily protection are at play. While the state views social immunity as a technique to protect the body of the nation against the threat of infectious diseases (as well as ‘contagious communities’),⁶¹ the survival of the Haredi social body is made possible by maintaining *immunity* from the external world and its potential dangers – which can include areas of healthcare. By applying Esposito’s (2015) conceptual analysis to the ‘hard to reach’ designation, it can be inferred that the Haredim are framed in public (health) discourse as claiming *immunity* from the citizenly obligation to accept immunisations and protect the body of the nation – which, in turn, disrupts the reciprocal circuit of social immunity (or *communitas*).

Vaccinations are a lauded public health and protective intervention used to arrest the transmission of certain infectious diseases at a population level. Haredi parents in Manchester prefer to negotiate uptake at an individual level; vaccinations are accepted broadly but cautiously, selectively and on their own terms to avoid danger or

harmful assaults on the immune systems of children. Portraying opposition to vaccinations as being an issue of ‘culture’ or ‘religious belief’ fails to grasp how responses to health services (that to do not adopt the desired manner of ‘compliance’) may result from a contest of guardianship and protection over the body and soul, which also intersects with constructions of risk and bodily damage. Only a minority of the *frum* mothers in Manchester opposed immunisations on the grounds of cosmology, although they would mobilise their interpretations of Judaic teachings to underscore their decisions. Vaccine hesitancies based on safety concerns might occur across the UK, but in Jewish Manchester the process and influences on vaccine decision-making can take on nuanced forms. While public health discourse and studies are quick to claim that there is no religious or *halachic* basis for Jews *not* to vaccinate their children (such as Stewart-Freedman and Kovalsky 2007), the concerns held by Haredi Jews in Manchester were overwhelmingly about safety and parental responsibility to protect their children.

Mistrust in vaccine safety as well as the state–NHS–pharmaceutical nexus often led *frum* mothers in Manchester to negotiate routine vaccination schedules rather than refuse them altogether. Haredi Jewish parents in Manchester do not accept childhood vaccinations without careful consideration of the risks they can present, which demonstrates how ‘compliance’ with health interventions is not an indicator of the extent to which parents trust Public Health England or the NHS to care for Jewish bodies. The MMR jab became a particular source of angst for *frum* mothers, and in this respect the Haredim are comparable to the broader non-Jewish population in the UK (see Cassell et al. 2006; Casiday 2005, 2007; Gardner et al. 2010; Petts and Niemeyer 2004; Poltorak et al. 2005). The issues that underlie Haredi responses to childhood vaccinations should therefore be discussed in the context of their being a minority group in the UK, as opposed to being a minority group with religious ‘beliefs’ that are obstructive to public health services.

Haredi minority groups emerge from this discussion as a group unfairly stigmatised as ‘hard to reach’ in the context of vaccination coverage and the target of intervention, probably because they tend to live in a particular geography rather than being dispersed throughout the state (as others who object to vaccinations might be, and as national variation in vaccination coverage indicates). Being portrayed as ‘hard to reach’ evokes a historical issue of positioning for the Haredim of Manchester. The juxtaposition of archival and ethnographic material in this chapter further demonstrates

how Jews in England have been the particular targets of public health debates and interventions in ways that are contiguous over time, which should not be ignored in current representations of the Haredim.

Notes

1. Mrs Kahn recalled that her son was administered the triple-antigen DPT vaccine in the early 2000s, though protection against these conditions is now offered in a six-in-one vaccine (see Appendix for current NHS childhood vaccination schedule).
2. Immunity, as expressed previously in this book, is a reaction (or intervention) to protect the body of the nation and its attempt to resist or incorporate foreign bodies, which Esposito (2015) frames as central to biopolitics.
3. Not all VPDs work according to social immunity (such as tetanus). VPDs require particular thresholds of social immunity. The threshold for measles, for instance, sits at 90–95 per cent, whereas rubella needs approximately 82–87 per cent of the entire population to be vaccinated (Milligan and Barrett 2015: 313).
4. Coverage ‘is defined as the number of persons immunised as a proportion of the eligible population’ (see Health and Social Care Information Centre 2014: 14).
5. Measles, mumps and rubella (MMR) coverage in England (2013–2014) for children reaching twenty-four months of age was 92.7 per cent (Health and Social Care Information Centre 2014), which falls short of the threshold of 95 per cent advocated by the World Health Organization (WHO). Whereas 59 out of 149 local authorities in England reached the threshold MMR coverage of 95 per cent and above, 68 varied between 90–95 per cent, and 40 local authorities failed to reach 90 per cent; two of which recorded coverage of less than 80 per cent (Health and Social Care Information Centre 2014). Coverage of all routine childhood vaccinations in 2013–2014 (when measured at one, two, and five years of age) was lower in England than all other countries in the UK (Health and Social Care Information Centre 2014). The stark variation in coverage across the UK in recent years raises the question of how responses to vaccination campaigns among ‘hard to reach’ groups compare with parts of the broader or ‘general’ population.
6. It has been argued that the term ‘herd immunity’ can be counter-productive for social groups who defined themselves by ‘going against the herd’ and leading an ‘alternative’ lifestyle which challenges the status quo (Sobo 2015: 395). For an example of ‘health protection target’ see Petts and Niemeyer (2004: 8). See Sobo (2015) for an example of ‘community immunity’.

7. 'Social immunity' also appears in Leach and Fairhead (2007: 5), but with no elaboration on how the authors interpret this term.
8. As Larson and colleagues (2011) note, vaccine decision-making is influenced by a diverse range of factors, which need to be taken into consideration by those responsible for public health delivery strategies.
9. For examples of studies that discuss or attribute low vaccination uptake in relation to 'cultural factors' or 'religious beliefs', see Lernout et al. (2007); Lernout et al. (2009); Top (n.d.); Wineberg and Mann (2016).
10. International public health studies present conflicting reports between religious motivations and objections to vaccinations amongst Haredi Jews, with this being observed, for example, in Haredi settlements in Israel but not in Antwerp (Lernout et al. 2009; Muhsen et al. 2012).
11. Global health and media discourse widely circulate the view that Nigerian Muslim groups are resistant to international public health interventions because of antifertility anxieties, yet anthropological research demonstrates how parental objections in the context of Nigeria are actually much more complex than this single explanation suggests. Attributing vaccine refusal solely to antifertility anxieties obscures the broader concerns of safety held by parents as well as their feelings of being disenfranchised by top-down government interventions (Renne 2006, 2009).
12. See GB127.M182/3/1: 1871–1872; also 1875–1876; M182/2/: 1877–1878; M182/3/2: 1887–1888.
13. It can be inferred that the Board had to report incidences of particular infectious diseases from a Medical Officer Report 1893–94, 'the poor were singularly free from infectious disease necessary to report to the authorities' (M182/3/3).
14. 'Children of every recipient shall receive instruction, or else relief is suspended' (see M182/3/1: 1874–1875). This illustrates how ambitions for anglicisation were fixed on the children of immigrant parents through educational policies, which had the hope of 'raising them in the social scale'.
15. Also *Matzot*. Unleavened bread, which Jews are mandated to eat over *Pessah* (Passover).
16. GB127.M182/3/1: 1876–1877.
17. GB127.M182/3/2: 1887–1888.
18. As demonstrated by European colonial history, including the French colonial occupation of Cambodia (Ovesen and Trankell 2010).
19. The strategies of health surveillance conducted by the Jewish Board of Guardians should be understood in its own submissive position to state authorities, and its own ambitions of anglicising 'foreign' Jews.
20. The UK sits in the WHO European region, which forms one of the six regional WHO offices. See WHO Regional Office for Europe (2013); European Centre for Disease Prevention and Control (2015) for further

- information on measles and rubella distribution and elimination in Europe, and failure for reaching the 2010 and 2015 targets.
21. For examples of the language styles used to frame Haredi Jews and 'hard to reach groups', see Ashmore et al. (2007) and Cohen et al. (2000). For similar examples in the context of Israel, see Anis et al. (2009) and Stein-Zamir et al. (2008).
 22. Emblematic of Foucault's aforementioned concept of 'governmentality', populations (and particular groups within a population) are cultivated and constructed as defined targets of subjugation and control, especially through institutions of surveillance, such as public health.
 23. For examples of the language used to frame Haredi Jews, see European Centre for Disease Prevention and Control (2012); Henderson, Millett and Thorogood (2008); Lernout et al. (2009); Local Government Association and Public Health England (2013); Public Health England (n.d.); WHO Regional Office for Europe (2013, 2016).
 24. Debates about compulsory vaccinations raise ethical questions about individual versus collective rights to protection. As Petts and Niemeyer (2004:9) note, 'compulsory immunization of an individual may be regarded as unethical. However, given the public good component of vaccination, so too may a decision not to immunize'.
 25. Prevention of vaccine-preventable disease cannot be sustained without a culture of immunisations, indicating how this public health intervention forms part of a 'technocracy' (Leach and Fairhead 2007). Here, various techniques are deployed to increase 'compliance' or 'uptake' and have the ultimate aim of 'instilling vaccination as a habit, and inculcating a desire for it' (see Leach and Fairhead 2007: 9).
 26. Jewish Manchester experienced an outbreak of measles in 2000 (in the aftermath of the 1998 MMR debate) largely because of a low MMR coverage by two years of age, falling short of the regional and national average (Cohen et al. 2000). However, Cohen et al. (2000) do not discuss the reasons for low acceptance of the MMR vaccine. Greater Manchester (including its Jewish settlement and the broader population) later experienced a prolonged outbreak of measles from October 2012 to September 2013. A large proportion of the 1,073 suspected cases of measles were observed in children and youths aged ten to nineteen, this group was reported as having low uptake of the MMR because of previous (and falsified) claims that the triple-antigen immunisation was causally associated with autism (see Pegorie et al. 2014).
 27. See Baugh et al. (2013); Loewenthal and Bradley (1996); Purdy et al. (2000) for the former. See Cunningham, Charlton, and Jenkins (1994) for the latter.
 28. This study should be viewed in its historical context, being published before the controversial (and falsified) claims by Wakefield et al. (1998). Andrew Wakefield, a British gastroenterologist, was the lead author of

the 1998 *Lancet* article that claimed the triple-antigen MMR vaccine may be causally associated with autism. The controversy sparked widespread vaccine hesitations and public distrust of the MMR vaccine, resulting in lower-level uptake across the UK with coverage levels falling short of social immunity thresholds. The research underpinning the 1998 article was highly flawed and in 2010 *The Lancet* formally retracted the article, and Wakefield was struck off the medical register by the GMC.

29. See Wineberg and Mann (2016: 4), who relay how the 'NHS thinks Jewish community fears immunizations, when majority of parents cooperate'.
30. See Cohen et al. (2000); Lernout et al. (2007); Lernout et al. (2009); Stein-Zamir et al. (2008); Stewart-Freedman and Kovalsky (2007), also Baugh et al. (2013).
31. Extrapolations between Haredi groups in Israel and the UK should be viewed with caution. It is widely accepted that particular Haredi minorities in Israel (such as the Satmar and Neturei Karta) do not recognise the authority of state institutions, which might underline their lower levels of immunisation uptake compared with other Haredi groups (see Stewart-Freedman 2007). These state-minority relations are specific to Israel due to opposition to Zionism, and neither Haredi nor Hassidish parents in Jewish Manchester described such anti-establishment views in relation to vaccine-decision making. It is also essential to bear in mind that relations between some Haredi minority groups and the Israeli State are fraught and fractious, with public health authorities viewing some Haredi Jewish groups as being apathetic 'toward preventive healthcare measures' and as responding with 'hostility toward services provided by the public health system' (Anis et al. 2009: 256). It has therefore been claimed that outbreaks of infectious disease require a 'culture-sensitive approach', especially among groups such as the Haredim, who experience 'implicit or explicit stigmatisation [... and] are judged as being difficult to treat and obstructive to the ingress of public health personnel' (Stein-Zamir et al. 2008: 3). Contentions and confrontations in Israel that entangle the Haredim with the body of the nation extend beyond healthcare in to other areas of civic life such as military drafting and political autonomy.
32. *Ze' Gezunt* (a pseudonym) is funded by a local health authority and produced by a Haredi organisation, which claims, among others, to be representative of the Orthodox Jewish population in Manchester. It is typically delivered to homes with a *mezuzah* (an encased parchment from the Torah) attached to the doorpost, signifying that Jews lived in that house.
33. *Posek* (sing.), *poskim* (pl.). One can approach a *posek* or rabbinical authority for a *psak halachah* (judgement of law).
34. Rabbinical interpretations of medical risk and danger are central to how *halachic* rulings on vaccination acceptance are formulated, for

- ‘medical science is key to the religious determination’ (Turner 2017: 2). This chapter instead focuses on how parents engage in vaccine-decision making based on *their own* interpretations of vaccine risk, rather than the risk analysis of religious authorities.
35. US-based lifestyle magazines and newspapers catering to *frum* and Haredi Jews published a range of articles on vaccinations in 2015 following the US multi-state outbreak. These magazines and newspapers were nuanced in how they addressed issues from social, political and international events, but were not considered acceptable by all Jewish locals in Manchester. The magazines and newspapers were widely available in Jewish Manchester, demonstrating the flows of communication around health issues (Figure 4.2).
 36. Chabad Lubavitch are actively involved in missionary work to increase religious observance amongst Jews, but not to attract non-Jews to Judaism (see Dein 2004). The pamphlet is intended to circulate Chabad interpretations of religious and philosophical teachings.
 37. ‘As for the question of vaccination, etc., which you would require if you make the trip [to Israel] in November, there is no basis for any anxiety in that respect’, Chabad Lubavitch *L’Chaim* (issue 855, 23 May 2014). This article was likely written in response to traces of polio discovered in multiple sewerage sites in Israel and the Occupied Palestinian Territories, prompting Public Health England to promote polio immunisation amongst travellers to these regions (Public Health England 2013a).
 38. Mrs Tananbaum clearly views vaccinations as an essential area of child health and a religiously binding conduct, but I later discuss how she preferred to negotiate the point at which her children were vaccinated (as opposed to refusing routine vaccinations altogether).
 39. Not all Haredi parents in Jewish Manchester were convinced of the efficacy of this centre for disseminating child health and development messages to the constituency. Mrs Albala, who described herself as being ‘at the bottom end of the Haredi spectrum’, was sceptical of whether health communication was reaching Haredi parents via the Centre, who instead viewed it as being used as a ‘cheap baby-sitting service’. Moreover, the local NHS health visitors who serve the in-house baby clinic were seen to be used only by parents occasionally, ‘when they need to use the health visitors, they do the odd injections but otherwise no. What it is meant to be, is not what it is getting used for’. I was also told that many Hassidish mothers did not view this centre as an acceptable space for their children.
 40. The term ‘underutilisation’ has also been used to describe parents who delay or refuse vaccinations (Muhsen et al. 2012), but I would instead argue that delaying the stage in which vaccines are accepted does not mean they are under-utilised, but utilised according to the judgement of parents.

41. What is also interesting is the language that Mrs Tananbaum used to describe her son's immune system (as needing to be fortified). When depicting an image of battling entities that are far removed from her child, Mrs Tananbaum can be understood as internalising and assimilating biomedical discourse of immune responses in her perception of the body (cf. Martin 1994).
42. Parents across England have viewed information provided by the government, public health authority, or healthcare professionals with distrust or as being conflicting (see New and Senior 1991; Evans et al. 2001; also Casiday 2005; Gardner et al. 2010). The view that parents received conflicting information surrounding the MMR can be situated in a broader socio-historical context in the UK, when 'public trust in government pronouncements on science and risk had already been severely tested' (Stöckl and Smajdor 2018: 242).
43. I use the term vaccine damage as a reflection on the UK Government's 'vaccine damage payment', which offers compensation if severe disability occurs following a vaccination.
44. It is here that we see most clearly how 'the interplay between individual-level and population-level risk highlights a point of tension in society between state public health interests and the individual "right to choose"' (Casiday 2007: 1067–1068).
45. Mrs Lisky's concern for cross-species contamination can be situated in a historical context of vaccine opposition. Formative vaccinations to prevent smallpox attempted to induce immunity through the animal-to-human transfer of cowpox matter, which was a socially contentious yet politically mandatory intervention in eighteenth and nineteenth century England. The reasons underlying resistance included the anxiety that transferring cowpox matter to humans could result in contamination with zoonotic diseases. The 1853 Compulsory Vaccination Act (applying to infants) instituted in England came to be viewed as 'political tyranny' by the working class, giving rise to a fierce anti-vaccination movement which resisted the institutionalised sanctioning of physical and spiritual contamination through 'blood pollution' (Durbach 2000). Anti-vaccination material at this time reproduced these concerns by featuring vaccinated humans growing cow heads or bovine features.
46. I use the term 'adverse reaction' to describe the (potentially severe) encounter between a body and an extraneous substance but also the multiple issues which can provoke an immune response. Whilst parents may identify a vaccine as the cause of disruption to their child's health (by way of adverse reaction), it is important to note that a reported adverse event does not necessarily implicate a vaccine as the cause (see Oxford Vaccine Group 2013). Bodily reactions might, for instance, result from a component of the vaccine itself, an issue in the supply, storage, and cold chain, or an underlying medical condition in the recipient or 'target' (Public Health England 2013b). Parents might

view a vaccine as the cause of an adverse reaction, but they might not be able to identify which component (if any) in the vaccination process triggered a reaction. Some of the above-mentioned causes of an adverse reaction can be more readily accepted over others by parents, which can result in all vaccines (and the biomedical technique of inducing immunity) rejected as being a 'toxic' intervention.

47. What is perceived as monstrous is defined and represented by its embodiment, and presents an insult to the socio-cultural construction of 'ideal bodylines – that is the being of the self in the body ... where everything is in its expected place' (cf. Shildrick 2002: 1).
48. Routine childhood immunisations which are produced with *human* derived cell-lines include rubella (forming part of the MMR vaccine). Those which are produced with *animal* derived cell-lines include the polio component of the 'six-in-one' vaccine (see Appendix 1), see Oxford Vaccine Project (2018).
49. Cell-lines are a 'technology of living substance' where the boundaries of the body are disintegrated at the cellular-level and reduced to fibres, constituting a microscopic degree of materialisation and commodification of the human body for biomedical and pharmaceutical profit (see Landecker 2007; Lock 2007; Lock and Nguyen 2010).
50. The continued use of manipulated cell-lines deriving from aborted fetuses is particularly problematic for Catholic religious authorities. Such vaccinations were viewed as 'tainted' by the Vatican's Pontifical Academy for Life, which decreed that there was a 'grave responsibility to use alternative vaccines' if possible but that 'vaccines with moral problems pertaining to them may also be used on a temporary basis' (see Pontificia Academia Pro Vita 2005).
51. Doctors have a contractual agreement to record any adverse reaction to an immunisation (or any other pharmaceutical) within a patient's medical record. It is advised that all suspected adverse reactions occurring in children should be reported to GP, or through the 'Yellow Card Scheme', which is specifically designed for voluntary reporting of adverse reactions (Medicines and Healthcare Products Regulatory Authority 2016).
52. Averse and adverse reactions to the pertussis immunisation described in these mothers' accounts resonate with previous studies into how Haredi mothers navigate immunisation services in London, where this particular jab was 'selectively declined' (Loewenthal and Bradley 1996).
53. The cultural construction and communication of vaccine safety is not a concern specific to the Haredim of Manchester, and parents in the broader population of England have demanded that expertise and evidence be based on lived experience of adverse reactions rather than epidemiological or population-level statistics alone (Casiday 2008: 130).

54. The authors suggest that improving knowledge of the Yellow Card Scheme may be one potential solution. This government intervention collates incidences of adverse reactions (though it may be affected by under-reporting).
55. The last recorded outbreak of rubella in the UK occurred in 2013, with twelve confirmed cases (NHS 2015b). Fewer than twenty congenitally acquired cases of rubella have been reported in the UK since 1997. Most incidences of congenital rubella occur in mothers who contract the infection abroad (see Royal College of Paediatrics and Child Health 2015).
56. The NHS does not recommend giving the MMR immunisation during pregnancy. The stage at which a mother contracts rubella can have different implications for the foetus. Risk of CRS is exceptionally high (90 per cent) during the first ten weeks of pregnancy and presents a strong likelihood of adversely affecting foetal development. The risk of CRS (causing visual or hearing impairment) drops to ten to twenty per cent during the eleven to sixteen week stage, with a low chance of deafness remaining until the twenty-week stage (see NHS 2015).
57. Although 'word of mouth' has been regarded as a 'potent source of rumours about vaccination dangers' for Haredi Jews, it has also proposed as a means to circulate an influential counter-narrative of immunisation safety (Henderson, Millett and Thorogood 2008). Rumour is often associated with the circulation of vaccine dangers yet the power relations that substantiate and underline hearsay are not always fully considered (see Feldman-Savelsberg, Ndonko and Schmidt-Ehry 2000).
58. Hebrew (*shailoh* was the vernacular in Jewish Manchester); a question put forward to a rabbinical authority that usually entails a *halachic* ruling, but can also be to solicit guidance.
59. Previous studies have remarked how public health officials colluded with rabbinical authorities in order to increase uptake of immunisations amongst Haredi minorities in Israel. In one instance, public health nurses and doctors were disguised in order to gain access to Haredi institutions, whereas another group refused to comply with rabbinical rulings to immunise children with the MMR or co-operate with state attempts to control outbreaks of measles (Stein-Zamir et al. 2007).
60. The fact that Haredi individuals do not always follow religious rulings or the dictates of authorities therefore demonstrates how 'emblematic labels and stereotypes of collective identity do not always provide reliable instruments of diagnosis of how people experience their own social identity' (Jacobson-Widding 1983: 23), or how they chose to care for their own bodies.
61. 'Contagious communities' is borrowed from Bivins (2015), who discusses the term in relation to the NHS and migrant groups in Britain.

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