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Superdiversity, population health and health care: opportunities and challenges in a changing world

Jenny Phillimore, Hannah Bradby and Tilman Brand

Introduction

The notion of superdiversity was introduced by anthropologist Steven Vertovec in 2004 and has rapidly gained traction across the social sciences and with policy makers worldwide. We argue that public health research would benefit from a superdiversity perspective especially in view of the often intractable nature of health outcome inequalities for migrant and minority groups (Mladovsky 2009). In this paper we consider the opportunities and challenges of superdiversity for public health. We outline the features of superdiversity, and how they differ from an ethno-national perspective, before reflecting on the limitations of historical approaches to researching diversity and health. Using the example of peri-natal mortality data from the UK, the problems associated with an ethnonational approach to public health research are highlighted and the potential that a superdiversity perspective has to reveal wide-ranging inequalities described. We set out some opportunities associated with superdiversity and some methodologies that can be implemented before suggesting how public health researchers might move forward in an era of superdiversity.

The emergence of superdiversity

The three past decades have seen a clear increase in the scale of migration within and into Europe, recently exacerbated by the humanitarian emergency in the Levant region. In some countries (e.g. the Netherlands, UK and Germany) these new arrivals have added to wellestablished minority communities now reaching a fourth generation. Arrivals from longstanding migration countries, linked to receiving countries by post-colonial relationships and/or bi-lateral labour agreements, have been joined by new arrivals from multitudinous countries, often without any prior historical relationship. Much attention has been given to the diversification of migrant flows which have resulted in new demographic patterns, in superdiverse urban locations (see Vertovec 2007). Such areas, sometimes called "arrival zones" (Robinson 2010), house people originating from multiple countries forming fragmented groups, or even isolated individuals, who are not part of a critical mass, alongside the long-established minority groups associated with old migration. The arrival of more people from more places has tended to be seen as the core characteristic of superdiversity. The characteristic "diversification of diversity" (Vertovec 2007) with arrivals having a range of origins, migration and employment statuses, faiths, levels of education, resources, cultures, rights and entitlements, is equally important for public health researchers.

Superdiversity goes beyond intersectional approaches to diversity, highlighting the complexity of populations where migration is a key factor. The concept has been criticized as exaggerated ethno-nationalism, as concealing structural forms of inequality (Raco et al. 2014) and as constructed from an entirely Global North perspective (Ndhlovu 2015). Yet it has been widely acknowledged as having potential to overcome the limits of ethno-national categorisations (Phillimore et al. 2015). Superdiversity underlines population complexity and fluidity, often utilising a geographical rather than ethno-national focus, avoiding the categorisation of populations by ethnic or country of origin (Cuthill 2017) and highlighting the multi-layered nature of populations in neighbourhoods where old and new migrants and minorities live with ethnic-majority native residents and where demographic changes have

become the norm (Pemberton and Phillimore 2018). These complex and evolving populations offer a range of challenges for healthcare provision and health promotion, particularly given evidence of continuing disparities in health outcomes, even before the emergence of superdiversity (Hernandez-Plaza et al. 2014; Bhopal et al. 2014; Fernald et al. 2016; Mladovsky 2009).

Ethno-national approaches

Prior to the post World War II labour migration to Europe, public health interest in migrants was largely as carriers of exotic pathogens representing a potential threat to resident population. The first large scale migrations post-World War II were analysed as a 'natural experiment' allowing comparisons between those who grew up elsewhere and those born in Europe (Ahmad and Bradby 2007). Categorisation by 'Country of birth' and 'Mother's country of birth' were used in the UK to identify migrant and first-generation populations. It was generally assumed that migrant populations would either assimilate or return "home" thereby eroding differences in population health outcomes. As differential health outcomes emerged in the second and third generations (from 1980s onwards), another means of identifying populations was needed. Post-colonial ethnic groupings were introduced to the UK (but not Northern Irish) census in 1991. They were developed over subsequent censuses and adopted in various other administrative and statutory data sets. Ethnic group categories identified specific groups with poor health outcomes, for instance high rates of mortality from stroke for people of Caribbean origin (Nazroo 2001). The extent to which this mapping of poor outcomes triggered a redistribution of resources to address disadvantages is not clear, but it made visible the positive health outcomes and lifestyle choices of some migrant groups, including, low smoking and alcohol consumption rates of women of South Asian origin (Bradby and Williams 2006) and the relationship between duration of time in host country and health outcome.

Ethnic categories were devised in the late 1980s and reflected the mass migration to the UK of the previous thirty years. Making visible inequalities resulting from the post-WWII migration was politically important, with perhaps the biggest outcome being attention to the lack of interpreters in public health services. However, there was very little flexibility in the classifications adopted, so the categories calcified quickly, and were unable to reflect ongoing globalised migration streams (Aspinall 2012). The specificity of the UK categories hindered comparison with other countries' ethnic groups (e.g. Netherlands) reducing the potential for comparative health research which could aid the identification of good practice in health care provision for diverse communities. But they also served to homogenise populations, reducing the potential to identify differential outcomes within populations and, when interpreted in essentialist terms, pathologizing culture or genetics as a causal factor in health inequalities.

The emergence of superdiversity further challenges such categorisations. In the UK the "other" category has grown rapidly to a point where, when survey categories are restricted to seven or eleven ethnic groups, the "other" category out numbers that of some existing ethnic categories (i.e. Irish or Chinese). But even if categorisations were to be updated to reflect current populations they would soon be outdated given the rapid changes in arrivals since the Balkan wars and the humanitarian crises in the Levant and parts of Africa. The fragmented nature of some populations is illustrated by an analysis of Birmingham GP Registration data, showing that fewer than 10 people had arrived from over 30 different countries in the three years prior to the study (Phillimore et al. 2010). With a single person arriving from Mongolia, Myanmar, Haiti and Burkino Faso, ethnic group has little explanatory power, and yet the range of different backgrounds present a challenge for healthcare provision.

Further, there is often no critical mass to justify the service provision tailored for a particular culture or language, or to train health professionals to develop the cultural knowledge that an ethnonational approach to provision viewed as critical to meet people's needs effectively (Phillimore 2011). Newly arrived migrants and healthcare providers frequently encounter 'novelty' (i.e. different ways of doing health) (Phillimore 2015) which makes adapting services to meet emergent needs challenging. Rapid and constant change also means that providers are continually addressing "newness" as new populations arrive, without knowing how to access healthcare, and then move on before trusting relationships can be built with professionals (Phillimore 2015). Inability to join an established community with enough cultural health capital (Shim 2010) to support the successful navigation of health services further hampers access (Green et al. 2014).

Fundamentally the existing categorisations used in Europe, whether they are ethnicity, country of origin, or migration background fail to capture the "diversification of diversity". Such categories omit the influence of structure, a factor of increased importance as access to healthcare becomes more and more restricted for some categories of migrant (Phillimore et al. 2018). They also overlook the importance of intersectionality and complexity in shaping access and outcomes and encourage rarefication and essentialisation of culture as causal factors in diverse populations' low levels of access to care and poor outcomes. Differences and commonalities within and between "groups" cannot be identified in small fragmented populations which blend into the "other" category, or in large ethnic groups where individuals with different levels of education, different migration statuses and levels of rights and entitlements are treated as homogenous.

Maternal and perinatal mortality in the UK and the problems with ethno-nationalism

The risks associated with failing to adapt existing ethno-national approaches to data collection and service provision are well illustrated by the UK's MBRRACE¹ data-set, collected annually for maternal and infant mortality. Analysis of this data is of critical importance – it is used to help UK maternity services to achieve the UK Government's "ambition to reduce the rate of stillbirths, neonatal and maternal deaths by 50% by 2030" (Manktelow et al. 2017:i) by identifying critical areas and monitoring progress. MMBRACE adjusts for the level of deprivation and for ethnicity "adjustment takes account of some of the factors known to affect rates of survival in particular populations" (Manktelow et al. 2017: vi). MBRRACE is adjusted for ethnicity on the basis that cosanguinuity is assumed to be higher in some ethnic groups, resulting in higher levels of birth defects plus the assumption that those groups are less likely to have antenatal tests, to attend monitoring appointments and/or to opt for an abortion if birth defects were detected². The ethnic categorisations used are White, Asian, Black, Chinese & Others and Mixed: cruder than those used in the national census and most public health service monitoring.

Despite this adjustment, MBRRACE shows stillbirth and neonatal mortality rates in the UK are higher in all non-white ethnic groups, with an increase in stillbirths and neonatal deaths over the period 2013 to 2015 recorded for Black babies (from 7.02 to 8.17 per 1,000 births compared to a reduction from 3.82 to 3.55 for white) (Manktelow et al. 2017: 94). Parts of Birmingham have some of the highest infant mortality rates in Europe (Phillimore 2016), while the city is soon to be the UK's largest city wherein white British residents form less than 50% of its population. The city's diverse residents are formulated from a long-established minority population and high levels of superdiversity. When we look at the MBRRACE map of adjusted stillbirth rates by Clinical

 $^{^{\}rm 1}$ MBRRACE is the acronym for Mothers and Babies Reducing Risks Through Audits and Confidential Enquiries in the UK

² Personal communications (throughout 2016, 13th December 2017 and 16th February 2018).

Commissioning Group (CCG), the dire situation of Birmingham is not in evidence, with rates only coded as up to 10% higher than the UK average (Manktelow et al. 2017: 94). The adjustment for ethnicity by just five ethnic groups masks the scale of inequality and it does so by holding the culture (ie marriage patterns and pre-natal healthcare seeking) of minority/migrant mothers responsible. An in-depth investigation of migrant women's access to maternity services in Birmingham showed that migrant mothers were indeed using antenatal care less than the general population but not because they did not value it, as was argued by some of the clinical professionals interviewed, but because they lacked money to pay for travel, were not permitted time off work, or were dispersed away from antenatal care by immigration services. Further, situations were identified where women of South Asian origin were unable to access appropriate ante-natal care: a woman raped by her husband was not given the opportunity to talk to a midwife alone to ask for the abortion that she wanted; a detained HIV positive asylum seeker was denied access to antenatal care (and retrovirals); midwives refused to believe a woman's claims that her baby was coming, leaving her in a waiting area unattended until her baby was stillborn. High mortality rates in parts of Birmingham are not presented as a problem for commissioning authorities but rather as an outcome of migrant/minority cultures. The approach adopted by MBRRACE fails to account for some of the intersectionality which characterizes superdiversity: migrant status, language capability and levels of cultural health capital.

A superdiversity perspective

Superdiversity calls for a broad perspective in public health, moving beyond an ethno-national approach and additive statistical adjustment of health outcomes for factors related to social inequality. Superdiversity does not imply that we must look at all population groups at once. We can analyse one group (or a limited number of groups) using a superdiversity lens. That means that we locate these groups in a superdiverse society in terms of their socio-economic position, their history of migration, their newness and how recent dynamics of migration and migration/ integration policies have shaped their social position. Returning to maternity, restrictionist policy such as the maternity charging policy in the UK, which essentially excludes some migrant women from antenatal care (Maternity Action 2018) may well be an important factor preventing access, rather than cultural factors. It is necessary to consider other variables which may underly ethnic differences when they are observed, in order to avoid forming incorrect conclusions.

Superdiversity also enables a focus on place. The UPWEB project examined healthcare seeking behaviours in eight superdiverse neighbourhoods in four European countries and focused upon the ways in which residents bricolaged across the health ecosystem within and beyond neighbourhoods and how healthcare providers adapted their services to meet diverse need (Author et al. 2018a &b). By focusing on commonalities and differences in actions taken across spaces, we were able to highlight ways of working that have potential to better meet need in demographically complex environments. Superdiversity can also mean exploration of intra-group differences which can deessentialise descriptions of diverse populations, identify sub-groups where outcomes are good, and examine why things work well rather than solely focusing on problems. Most importantly superdiversity leads us to ask which differences make a difference to outcomes and thus to better target public health policy.

There is no specific research methodology associated with superdiversity, but some existing methods may be particularly useful, including maximum variation sampling, respondent driven sampling and community research (Goodson and Grzymala-Kazlowska 2017). Essentially researchers need to ensure an inclusive sampling strategy, which can be achieved for qualitative research by maximum variation sampling, a form of comparison-focused sampling that selects cases based on their difference from each other, to identify factors explaining commonalities and differences

through comparison (Patton 1990). In quantitative health surveys, certain migrant groups are regularly underrepresented (Ranganathan and Bhopal 2006, Shaghaghi et al. 2011, Redwood and Gill 2013). Trust has been identified as a key issue for reaching these groups (Ibrahim and Sidani 2014). Respondent driven sampling is a peer-to-peer sampling approach which builds on trust and social relations within so called hard-to-reach groups (Heckathron 1997, Tyldum and Johnston 2014), which may be required in a superdiverse context (Platt et al. 2015).

A superdiversity perspective demands a reflective use of social categories. In the context of intersectionality research, McCall proposed distinguishing between three approaches that criticise or go beyond the established use of social categories: anti-categorical, intra-categorical and intercategorical (McCall 2005).

Anti-categorical approaches try to deconstruct established categories of ethnicity/ migration making visible the political use and stigmatisation of certain categories. In most cases this is accomplished by qualitative methods such as discourse analysis (Prior 2011). In quantitative research a strict anticategorical approach has not yet been established. In discussions about measuring health inequalities in the late 1990s, Murray and colleagues proposed analysis of differences in health only for the entire population and making comparisons across regions of the world (Murray et al. 1999). This method is agnostic to social groupings because they involve value decisions and definitions and the meanings of group membership vary by region/ country (Gakidou et al. 2000). In terms of superdiversity research this would mean that we compare health outcomes across more or less diverse regions or even cities to identify regions with poor health or with large within-region variation in health outcomes. The disadvantage of the anti-categorical approach is that it cannot analyse the extent to which inequalities relate to population composition.

The intra-categorical approach looks at within group variation. This could be accomplished in a one-group design where health outcomes of one (migrant) group are analysed in terms of socio-economic status, gender, sexual orientation, history of migration or transnational ties. An intercategorical approach provisionally adopts social categories and analyses how these categories simultaneously affect health by means of interaction terms or multilevel analysis (Bauer 2014, Evans et al. 2017). This approach is an extension of existing approaches to health inequalities but adding more complexity to the analysis.

However, such an approach is challenging in the face of fragmentation. Given that small groups are a key characteristic of superdiversity, such analyses will not yield useful results unless sampling is purposively targeted. Analysis of health inequalities is sensitive to the choice of the reference category (e.g. best-off group), and with more diversity it becomes less obvious what the best-off group is and how to order the other categories (Harper and Lynch 2006). There is a need to identify methods for assessing health inequality among groups that cannot be ordered hierarchically. As population and population groups become more diverse, the same may apply to health outcomes, and the population group average will become less meaningful, with more emphasis needing to be placed on population group variance (Merlo 2014).

Conclusions

The advent of superdiversity brings a level of demographic complexity and fluidity that challenges public health researchers and requires new ways of working. It also draws our attention to some of the problems with the ethno-national approaches conventionally adopted in public health research which, despite decades of work on migrant and minority health, have not been resolved. While some methods show potential to provide the more nuanced approach to research that is necessary

in complex populations, there is no one approach that can be adopted. Instead we argue that superdiversity can at the very least imply greater reflexivity about how we research diversity. We must justify all classifications in terms of the research question being explored and theorise the likely role of categories of diversity prior to analysis, rather than assuming that genetics, evolution or culture have a determining role after population differences are identified.

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