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**HETEROGENEITY/GRANULARITY IN ETHNICITY CLASSIFICATIONS PROJECT: THE
NEED FOR REFINING ASSESSMENT OF HEALTH STATUS**

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Abstract:

Background: Identifying ethnic inequalities in health requires data with sufficiently 'granular' (fine detailed) classifications of ethnicity to capture sub-group variation in healthcare use, risk factors and health behaviours. The Robert Wood Johnson Foundation (RWJF), in the United States (US), commissioned us to explore granular approaches to ethnicity data collection outside of the US, commencing with the European Union.

Methods: We examined official data sources (population censuses/registers) within the EU-28 to determine the granularity of their approach to ethnicity. When ethnic information was not available, **related variables** were sought (e.g. country of birth).

Results: Within the EU-28, we found 55% of countries **collected data on ethnicity**. However, only 26% of these countries (England, Wales, Northern Ireland, Scotland, Republic of Ireland, Hungary, Poland and Slovakia) had a granular approach, with half of these being within the UK. Estonia, Lithuania, Croatia, Bulgaria, Republic of Cyprus and Slovenia collected one to six categories. A 'write-in' option only was found in Latvia, Romania and the Czech Republic. Forty-five percent of countries did not collect ethnicity data but collected other **related variables**.

Conclusions: 1) Although there is reasonable attention to the diversity of ethnic groups in data collection, a granular approach does not predominate within EU-28 classifications. 2) Where ethnicity is collected, it is conceptualised in different ways and diverse terminology is used. 3) **A write-in option provides the most granular approach**. 4) Almost half of the countries **did not collect data on ethnicity, but did collect related variables that could be used as a proxy**.

Keywords: *Ethnic groups, Data collection, Censuses, Population registers, Healthcare*

Introduction:

Current migration dynamics **have contributed to the** growing diversity of populations in Europe and worldwide.(1) During 2015, 2.4 million people from non-EU countries (**including many asylum seekers**) migrated to one of the EU-28 member states.(2) This situation has become a key public health issue as it challenges healthcare systems to meet the needs of increasingly heterogeneous populations. It has become critically important for health policy-makers, planners and equality bodies—across all nations—to obtain and use high-quality data **that** adequately captures the composition of populations **to inform measures aimed at identifying and reducing disparities**.(3, 4)

In 2015, the Robert Wood Johnson Foundation (RWJF) (www.rwjf.org/), in the United States (US), instigated a multi-component project to examine ethnic/racial data collection in the United States (US). The US recognise six categories of ethnicity for data collection, and there are a large number of categories not officially reported.(5, 6) These categories do not provide detailed enough information to identify variations in health needs, and the use of these categories can mask existing inequalities in health, healthcare and social determinants. The RWJF decided to explore how these data could be disaggregated into more 'granular' categories, meaning more detailed/finer categorisation. For example, the 'Asian' category used in the US encapsulates a large, heterogeneous population which could be disaggregated to origins from east of Istanbul through to Japan. (7) To supplement and inform this work, the RWJF commissioned our Heterogeneity/Granularity in Ethnicity Classifications (HGEC) project to gather perspectives, from within Europe and internationally, on approaches to collecting granular ethnicity data. This paper presents the HGEC European overview. It is the first study to examine the granularity of ethnic classification in the European Union, **though a prior study has looked into the different methodologies for collecting ethnic data in Europe**.(8)

Previous research has examined the availability of official international data sources which collect **data on ethnicity**.(9, 10) A global survey of ethnic enumeration in the 2000 national

censuses found that 63% of countries included some ethnic categorisation.(9) In Europe, projects have also examined official data sources for migrant and ethnicity/race health information, (e.g. [the Migrant Integration Policy Index “MIPEX”](#) and Migrant and Ethnic Health Observatory “MEHO”), (11, 12) and these demonstrated a very mixed landscape. In Britain, for example, there is support for the collection of ethnicity data and the health of minority ethnic groups is a government priority within population health policy.(13) The British census office noted that ethnicity data was collected because of a recognised need for reliable information about diverse socioeconomic factors, and these data have been used to study inequalities in health.(14) There is also supportive legislation which highlights the crucial role of data in supporting anti-discrimination policies.(15, 16)

Conversely, much debate surrounds the benefits and risks of the official collection and use of ethnicity data within other parts of Europe, as it is regarded as sensitive information.(4, 15) In France, for example, it is feared data could be misused to create and maintain divisions between majority and minority groups. By law, France do not collect ethnicity in their census. However, under the European Data Protection Directive, no prohibition of ethnic data collection exists and France’s position is their interpretation of the law. (4)

Resulting from these tensions, collection of ethnicity data either remains inadequate in most of Europe because countries do not systematically collect data, or because what they do collect is inadequate for health research, policy, and practical purposes.(8, 17, 18) Even in countries where relatively granular data are collected, there remain limitations in capturing the diversity required to inform analyses of health inequalities.(19)

Methods

We used official data sources from the EU-28,(20, 21) to give an overview of the collection of granular ethnicity at the European level, using only official EU member states. [Supra-national data sources were also consulted to provide greater insight to our findings, but were](#)

not used as a source of primary data. For the purpose of this study, we considered the four UK countries individually: England, Scotland, Wales, and Northern Ireland.

Research questions

1. From official sources within EU-28 countries, which countries collect data on ethnicity, and what degree of granularity is there within their classifications?
2. For those countries that do collect ethnicity data, what approaches to terminology are used within their categorisations?

Identification of literature and data extraction

We identified literature by searching the sources listed in Box 1, devised in consultation with two expert librarians. Our Research Fellow (NV) screened titles and abstracts found in electronic databases, documents from citations, and key websites according to agreed inclusion and exclusion criteria (Box 1).

-----Box 1 (ABOUT HERE)-----

As the HGEC findings are to inform the wider work of the RWJF, we organised our results according to the standards for the classification of federal data on race in the US census bureau, as well as in the [US Office of Management and Budget](#), which have a minimum of six categories.(5, 6) Granularity was determined by the number of ethnic categories a country collects. We considered that countries with one to six 'tick box' categories had some granular approach; while countries with more than six 'tick box' categories and countries with a write-in option (allowing any free text answer) were considered as having a more granular classification.

Expert peer review

An international expert group was organised to provide feedback on preliminary results. The results of this component of the project were internally peer reviewed by two members of this expert group.

Results

Collection of ethnicity data and degree of granularity

We identified six countries whose official census had one to six ethnic categories (Table 1); the maximum number of categories being six (Estonia). Most countries included a write-in option. Two countries (Bulgaria and Slovenia) included an option where respondents could choose not to answer. For countries such as Estonia, Lithuania and Slovenia, the census question on ethnicity **was** based on nationality, whereas Cyprus and Bulgaria included ethno-religious groups (e.g. Maronite) and Roma people, respectively.

-----Table 1 (ABOUT HERE)-----

We found eight EU-28 countries with more than six categories (Table 2), the maximum being 19 (Scotland and Hungary). Four of these countries were within the UK: Scotland, England, Northern Ireland and Wales. These four countries offered a wide range of options for disaggregating the White population group. Additionally, the Scottish, English and Welsh census had relatively disaggregated classification for Asian and African, Caribbean or Black groups. In contrast, the Republic of Ireland and Northern Ireland provided limited options for these groups.

There is a rapidly increasing population of people globally who identify as mixed-ethnicity and this has been included as a category in Scotland, England, **Northern Ireland** and Wales. Scotland's mixed category is a write-in option, compared to England and Wales which

included disaggregated 'tick boxes' within the Mixed/multiple ethnic group category (e.g. White and Black Caribbean) **and also a write-in option.**

-----Table 2 (ABOUT HERE)-----

All UK countries provided a Gypsy/Traveller category ('Irish Traveller' in Northern Ireland) and the Republic of Ireland had 'White Irish Traveller'. Hungary, Poland and Slovakia included an option for the Roma population. However, these categories may still consist of people with very diverse ethnic backgrounds, for example, the Roma population sub-groups (22) and Hungarian sub-groups (e.g. Romungro, Beás and Lovári).

Regarding the rest of the countries, we found three countries (Latvia, Romania and Czech Republic) provided solely a 'write-in' option to self-identify using free text. In the 2011 Romanian census, the ethnicity question asked "What ethnic group does the person consider that he/she belongs to?", stating that "Each person is free to express his or her opinion, without any constraints". (21)

The remaining 14 countries (Table 3) did not record ethnicity and instead recorded **related variables**, such as country of birth, **parents' country of birth**, citizenship **or** nationality.

Approaches to terminology used within ethnic categorisations

In countries where ethnicity was collected, operationalisation of the concept varied, as reflected in both the questions asked and the response categories. Generally, the question asked for 'ethnicity' combined with other terms, such as 'ethnic affiliation' (Poland), 'ethnic nationality' (Hungary), 'ethno-religious' group (The Republic of Cyprus), and **'ethnic or cultural Background' (Republic of Ireland).**

Response categories also used combinations of concepts. The four UK countries based their classification on a concept of ethnicity with elements of ancestry, **geographical origin** and

skin colour. Most other countries based their categories on national identities (17) (e.g. Hungary), both within their population and the main immigrant groups (Bulgaria, Estonia, Lithuania and Croatia). Another approach was the use of ethno-religious groups, as seen in Poland, Slovakia, and the Republic of Cyprus (e.g. Maronite and Latin).

Some countries combined these approaches to attempt to measure how people perceive themselves. In Poland, for example, the categories included a combination of nationality (Polish, Belarussian, Czech, Lithuanian, German, Armenian, Russian, Slovakian and Ukrainian), ethnicity (Karaitic, Lemko), language/religion (Tatar, Jewish), and ethnic minority groups (Romany). While, uniquely, the 2011 census of Slovenia gave the option of non-disclosure, with the choices of “I’m nationally/ethnically indeterminate”, and “I don’t wish to answer this question”.(21)

-----Table 3 (ABOUT HERE)-----

Discussion

Summary of main findings

This study summarizes current approaches to the collection of granular ethnicity data within EU-28 countries. Our results showed: 1) Although there is reasonable attention to the diversity of ethnic groups in data collection, a granular approach does not predominate within EU-28 classifications. 2) Where ethnicity is collected, it is conceptualised in different ways and diverse terminology used. 3) **A write-in option provides the most granular approach.** 4) Almost half of the countries **did not collect data on ethnicity, but did collect related variables that could be used as a proxy.**

Generalisability

This project was restricted to the EU-28. Although this work is specific to these countries' contexts, the data collection and approaches to ethnic classification are likely to be generalisable to other settings.

Strengths and limitations

Strengths of the HGEC project include the breadth of overview and the attention given to exploring the granularity of ethnic classifications across the EU-28. In this paper, we have also contextualised our findings in relation to the **international** literature. Examination of additional information sources could have augmented our findings, particularly **supra-national data sets and country-specific health data sets (surveys and routinely collected data)**. This may have revealed greater complexities, for example situations where it is forbidden to record ethnicity on healthcare records, explicitly to prevent discrimination, and investigation of how researchers approach such situations. However, it was too large a task to comprehensively access these data for the number of countries covered in **this overview**. It would have also been interesting to explore intersectionality (e.g. of ethnicity, gender, socioeconomic status) and multiple discrimination, but this was also beyond the scope of this project.

The HGEC project is part of a larger international project for the RWJF in which we also undertook more in-depth reports of data sources for seven countries (three within Europe), a summary of which will be published by PolicyLink (<http://www.policylink.org/our-work/community/health-equity/data-disaggregation>).

Relationship to existing knowledge and practice

Ethnicity data collection

Research has demonstrated inequalities in health across diverse ethnic groups.(7, 23-25) Despite the recognised need to identify ethnic groups to promote equity in health policy and planning purposes, we found that granular classifications do not predominate within the EU-

28. It appears more commonplace, and perhaps more accepted, to collect **variables that could be used as a proxy**, such as nationality, country of birth and parents' country of birth.(26) Some studies have used these variables to identify the generation of migration (**e.g. second generation, children of migrants born in the receiving country**) which, in relation to health, can influence health behaviours and risks of disease. However, for successive generations this approach fails to adequately capture population diversity.

Routinely collecting ethnicity data within healthcare settings is a preferred model for analysing health/healthcare inequalities.(27) However, even in countries which have collected ethnicity information for some time in their census, the routine collection of these data is still relatively new. Their analyses have primarily relied on research using data linkage of census and healthcare datasets.(28, 29) At this time, the census classifications likely best reflect each country's approach to ethnicity data collection.

Conceptualising ethnicity and diverse terminology

We found that censuses and population registers which did measure ethnicity, do so in very diverse ways. **Even when examining countries with comparable numbers of categories, there was no consistent approach to the classifications used, except within the UK, where public bodies, for example the NHS, are bound by law to the collection of equality data. Some of the most disaggregated categorizations, such as in the UK and Republic of Ireland (which does ask for 'ethnic or cultural background'), despite multiple response options, still lack a strong cultural dimension (seen in countries who incorporate language and religion) which could help reflect 'belonging to a group' and also current conceptual shifts from biological conceptions of ethnicity, to the cultural understanding of group identity.**(30)

Census classification faces even greater challenges due to the growth of mixed or multiple identities within population groups.(31-33) Previous research has shown that "dual identification and multicultural environments may be associated with a positive sense of racial identity", but also 'mixed' population groups have been demonstrated in some studies

to exhibit poorer health outcomes. (14, 34, 35) Some countries (e.g. England, Scotland and Wales) include a mixed group category. Scotland had a single write-in category compared to England and Wales, which had four categories (three exact combinations and one write-in option). However, further work is needed to develop approaches to this categorisation (7, 33, 36), as well as how to analyse data for 'mixed' populations and unpack the meaning of findings for a group that is inherently so diverse and increasingly heterogeneous.

A write-in option as the most granular approach

Three countries (Latvia, Romania and the Czech Republic) were found to offer a 'write-in' option for ethnicity and were exclusively free text, with no predetermined categories to choose from. This approach offers the most scope for granularity. However, a sole write-in option can create difficulties for respondents in understanding the question, with no set categories to refer to, leading to poorer quality data and lower response rates. It may also be problematic for data interpretation due to the vast number of potential responses and the subsequent decisions required for statistical analyses.(37) These data are often only collated and analysed at an aggregate level, which negates the value of this granular approach, and removes the element of self-identification. Thus, this method will only be valid if granularity is maintained when high quality data are analysed, reported and used to inform health care and policy.

Countries collecting variables that could be used as a proxy

Almost half of the EU-28 countries did not collect ethnicity, but did collect related variables. As mentioned earlier, in France there is a refusal to collect ethnic data due to the judicial interpretation of data collection which may be sensitive. Other countries may not have considered collecting ethnicity, and some view related variables as more informative. For example, The Netherlands prefer the objective measure 'country of birth' over what they view as a more subjective measure of ethnicity.(26) Collecting nationality is also recognised as important, particularly to understand healthcare access for migrant populations,(11)

though the use of nationality as a variable can be ambiguous; sometimes referring to origins and other times to legal citizenship status.

Potentially, collecting a cluster of variables (e.g. nationality, country of birth, language spoken and ethnicity) presents the most comprehensive approach for assessing health inequities in diverse population groups, selecting variables where appropriate for different research enquiries.

Potential factors influencing the collection of ethnicity and categories/classifications

Diverse approaches to the collection and classification of ethnicity data relate, in part, to governmental influence on ethnic enumeration and an individual country's ideology and perspectives on operationalising these data. (10) Some country-specific contextual factors which may influence their perspectives include; having, or not having a long history of immigration diversity; low ethnic density; politics and concerns among the policy making community; historical events, including past conflict and persecution; inter-ethnic relations; and ongoing migration patterns.

The position of some countries is that collection of ethnic data could lead to the essentialisation of ethnic groups in forcing individuals to identify solely with one ethnicity, and to the abuse of data and racial discrimination. **It is an interesting dichotomy that explanations both for the absence of ethnic statistical data in some EU countries and its promotion in others might be used in efforts to in the design legislation to prevent discrimination and promote cohesion.**(8)

There are also conceptual and situational challenges for official population registers/census. The conceptual issue is a lack of **shared** understanding of what determines ethnicity, or why **such data** is important for public health. The situational issue refers to potential stigma and fear associated with disclosing ethnicity, the degree of which may vary according **to the context in which data are collected, meaning that figures from different sources may vary widely and official data may not be reliable, especially at a granular level for vulnerable groups (e.g. Roma population).**(38)

How this work can influence future research and practice

Our findings concur with previous explorations (8, 9) of ethnicity data collection within Europe, showing an extremely varied approach, ranging from some countries not collecting ethnicity, to others taking significant consideration of granularity. In order to achieve a situation where ethnic inequalities in health and health care can be identified and addressed through public health research and practice, there needs to be a more consistent and granular approach to the collection of ethnic data within Europe. Ethnic classifications and data use in Europe do not reflect the current dynamics of population diversity (e.g. fixed homogenous ethnic categories in the census) and this creates gaps in understanding the sociocultural and political factors that influence people's health and quality of life. Failure to include disaggregated data hinder efforts to understand, routinely monitor, and address inequities in health in Europe. The use of more disaggregated ethnicity data, in conjunction with other related variables, would help the public health community to unveil the "invisibility" of diverse population groups.

However, it is pivotal to recognise that the diversity of approaches in ethnic classifications in the EU-28 reflect multiple country-specific contextual factors. This complexity impedes the idea of advocating for a unified approach to the collection of ethnicity data for population health purposes within Europe, and as a result, the persisting diversity of approaches will continue to create obstacles for cross-border research and international comparisons. Nevertheless, it may be possible to promote agreement of some overarching principles and the idea of increasing the collection, and granularity, of ethnicity data in ways which are appropriate to each country's context.

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Conflicts of interest: *None declared.*

Keypoints

- Ethnicity is conceptualised in different ways within European official data collection, using diverse terminology, and a granular (fine detailed) approach to ethnicity classification does not predominate within EU-28.
- Almost half of the EU-28 countries **collect related variables that could be used as a proxy.**
- The complexity of country-specific contexts within EU-28 impedes a unified approach to ethnicity classification, but it may be possible to agree on some overarching principles.

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