ELSEVIER

Contents lists available at ScienceDirect

Journal of Migration and Health

journal homepage: www.elsevier.com/locate/jmh





The prehospital care experiences and perceptions of ambulance staff and Eastern European patients: An interview study in Lincolnshire, UK

Viet-Hai Phung ^{a,*}, Dr Zahid Asghar ^a, Professor Sundari Anitha ^b, Professor Aloysius Niroshan Siriwardena ^a

- ^a Community and Health Research Unit (CaHRU), School of Health and Social Care, University of Lincoln, Lincoln, LN6 7TS, UK
- ^b School of Social and Political Sciences, University of Lincoln, LN6 7TS, UK

ARTICLE INFO

Keywords: Ambulance Migrant Healthcare Europe Interview

ABSTRACT

Background: EU enlargement after 2004 was a major factor in increasing Eastern European migration to the UK. This population requires access to high quality public services generally, and ambulance services more specifically. To understand how Eastern European migrants use ambulance care, this study explored the perceptions and experiences of ambulance staff and the Eastern European patients themselves.

Methods: We undertook qualitative semi-structured interviews across Lincolnshire. Purposive and maximum variation sampling ensured that participants were knowledgeable about Eastern European patients' use of ambulance care and were demographically diverse. Data were analysed using framework analysis.

Results: There were interviews with 15 ambulance staff and 12 Eastern European patients. A staff interviewee problematised "Health Tourism", which suggests that migrants deliberately exploit state-funded healthcare. However, most disagreed. Patient interviewees often undertook medical travel to access healthcare in response to perceived healthcare problems in the UK. Medical travel increased the likelihood of ambulance staff encountering foreign medication. Variable quality of, and access to, professional interpreters prompted patients to rely instead on informal interpreters. Patients did not register with GPs perhaps due to limited understanding of how the NHS worked. This led to inappropriate use of ambulance services. Recommendations for service delivery improvements included: Eastern European language information on how and when to use ambulance care; improving GP registration; and greater engagement between the ambulance service and Eastern European communities.

Conclusions: Frequent medical travel can limit how Eastern Europeans acculturate to the NHS and anchor roots in the UK. Acculturation is about how migrant cultures adjust to the host country. This is not assimilation, where they dilute their cultural identity. Language and communication barriers, as well as inadequate availability and quality of interpreting services, can impede patient-staff dialogue in time-critical emergencies.

Introduction

There is a growing Eastern European population in the UK, which requires high quality health services, including ambulance care.

The largest expansion of the European Union (EU) occurred in 2004 with the accession of the former communist A8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and

Slovenia) as well as Cyprus and Malta. Citizens of these new member states can now live and work anywhere within the EU (O'Brien and Tribe, 2014, Vargas-Silva and Walsh, 2020). Bulgaria and Romania (A2) joined with transitional arrangements from 2007. After Accession, many A8 and A2 citizens moved to the UK (Office for National Statistics ONS 2017a). The significant Eastern European immigration largely drove the introduction of the 2010 Equality Act (Her Majesty's Government,

Abbreviations: A2, Romania and Bulgaria, who joined the EU with transitional arrangements in 2007; A8, Eight Eastern European countries who joined the EU in 2004; A&E, Accident & Emergency; CPD, Continuing Professional Development; CR, Critical Realism; ED, Emergency Department; EMAS, East Midlands Ambulance Service NHS Trust; EU, European Union; FA, Framework Analysis; FRV, First Response Vehicle; GP, General Practitioner; HRA, Health Research Authority; IRAS, Integrated Research Application System; NHS, National Health Service; UK, United Kingdom.

E-mail address: vphung@lincoln.ac.uk (V.-H. Phung).

https://doi.org/10.1016/j.jmh.2022.100133

Received 3 December 2021; Received in revised form 12 September 2022; Accepted 12 September 2022 Available online 13 September 2022

^{*} Corresponding author

2010), as well as policies covering NHS organisations, including ambulance services (NHS, 2012, NHS, 2013).

Eastern Europeans in the UK experience shared barriers to access, positive experiences, and outcomes of health services. These include: limited understanding of the NHS (Madden, et al., 2017, Phung, et al., 2020); dissatisfaction with GPs (;Phung et al., 2020); differing health expectations (Phung, et al., 2020, Madden, et al., 2014); travel related to medical need (Madden, et al., 2017; Phung, et al., 2020); language and cultural barriers (Phung, et al., 2020, Yakubu, et al., 2018). These barriers can cause inappropriate use of health services, including the Emergency Department (ED) (Leaman, Rysdale, and Webber, 2006).

Research evidence exists on minority ethnic and migrant groups' use of prehospital care, as well as NHS use by Eastern European patients (Madden, et al., 2014, Collis, Stott and Ross, 2010; Tobi, Sheridan, and Lais, 2010, Patel, 2011, Health and Well-being Suffolk, 2015), but comparatively little on the latter's use of ambulance care. This study aimed to fill this gap by exploring the experiences and perceptions of Eastern European patients and ambulance staff providing care to them.

Conceptual framework

Barriers to accessing, having a good experience and outcomes from, healthcare can arise due to incongruence between the characteristics of service users and providers (Levesque, Harris, and Russell, 2013; Ricketts and Goldsmith, 2005). Health policy sets the framework for service provision and delivery (Lundin, Hadziabdic, and Hjelm, 2018). However, access also depends upon patient satisfaction and their awareness of healthcare services (Ricketts and Goldsmith, 2005; Andersen, 1968, Saurman, 2015).

The interaction between service providers and users evolves over time (Penchansky and Thomas, 1981, Frenk, 1992). Patient, provider and system level barriers (Scheppers, et al., 2006) mediate access to, experiences of and outcomes from, healthcare. Patient level barriers may include: geographical (Bhandari, et al., 2017); mobility; social networks; understanding and awareness of how and when to use healthcare services (Tobi, Sheridan, and Lais, 2010); and increasingly, digital literacy.

Beyond the structural barriers associated with experiences of discrimination and othering, for migrants, these barriers are also shaped by their ability to acculturate (Fox, Thayer, and Wadhwa, 2017, Castaneda, et al., 2015) and anchor (Grzymala-Kazlowska, 2018) themselves in the host country. Acculturation is defined as "changes in beliefs, values, identity, or behaviours such as language, customs, diet, or social relationships that occur in minority culture individuals as a result of prolonged contact with the majority culture" (Fox, Thayer, and Wadhwa, 2017). Similar to acculturation is anchoring, which is "the process of searching for footholds that allow individuals to acquire socio-psychological stability and security and function effectively in a new or substantially changed life environment" (Grzymala-Kazlowska, 2018).

Medical travel commonly refers to people travelling from their country of residence to another country to access medical treatment (Connell, 2013). Frequent medical travel to access medical care from a person's country of origin can inhibit acculturation (Fox, Thayer, and Wadhwa, 2017, Castaneda, et al., 2015) or anchoring (Grzymala-Kazlowska, 2018) by impeding command of the language and understanding of how to use healthcare services in the host country. These problems are compounded by lack of information about healthcare services in the relevant languages (Jayaweera, 2021). This could lead to under-use (Crede, Such, and Mason, 2017) or over-use (Leaman, Rysdale, and Webber, 2006) of services, including prehospital care.

Each part of an individual's identity confers varying disadvantage and privilege (Castaneda, et al., 2015; Gkiouleka, et al., 2018; Crenshaw, 1989). Individuals may be disadvantaged by socio-economic factors, such as low income, living in deprived areas, as well as other demographic factors, such as education, gender, age, etc (Marmot, 2010; Marmot, et al., 2020).

The overarching philosophy of the study was Critical Realism (CR). This is because it examined the influence of ambulance service structures, mechanisms, policies, and protocols on how services are delivered by staff and received by Eastern European patients in Lincolnshire (Fletcher, 2017; Walker, 2017).

Material and methods

Study design

We conducted qualitative semi-structured face-to-face interviews with ambulance staff in Lincolnshire, UK from April 2018-January 2019. We also undertook qualitative semi-structured interviews with Polish and Lithuanian users and non-users of the ambulance service in Lincolnshire between June 2019 and October 2020.

Some patient interviews were individual face-to-face, while others were undertaken with couples. Interpreters were present for those with limited spoken English. Because of the Covid-19 pandemic, the last three interviews were undertaken by telephone (Torrentira Jr, 2020; Lobe, Morgan, and Hoffman, 2020; Rahman, et al., 2021).

Setting

Lincolnshire is a predominantly rural county in the UK East Midlands region that has experienced significant Eastern European migration since EU Accession in 2004 (Lincolnshire Research Observatory, 2013). In Lincolnshire, Polish and Lithuanian are the two most commonly-spoken foreign languages (Lincolnshire Research Observatory, 2013). The staff interviews occurred at their workplace or home. The face-to-face patient interviews took place in homes or in public places, such as libraries or the university.

Study participants and recruitment

Ambulance staff participants were recruited through ambulance service advertising via posters in all Lincolnshire ambulance stations. VHP, as the interviewer, had contacts within the ambulance service. Participants who had attended to at least one Eastern European patient in Lincolnshire since October 2015 were purposively sampled (Palinkas, et al., 2015, Creswell and Plano Clark, 2011). Snowball sampling, through contacts with ambulance staff, supplemented participant recruitment (Bonevski, et al., 2014). Maximum variation sampling ensured a range of different ages, gender, locations, job roles and length of experience (Palinkas, et al., 2015). We did not pay staff participants, although they could include the interview on their Continuing Professional Development (CPD) portfolio.

For the patient interviews, we purposively sampled (Silverman, 2010) Polish and Lithuanian migrants in Lincolnshire, because they are the biggest Eastern European migrant groups in the county. We used a gatekeeper known to the research team to recruit. As with the staff interviews, we adopted maximum variation sampling (Kim, Sefcik, and Bradway, 2017; Aspers and Corte, 2019) to interview Polish and Lithuanian patients in three locations with a large Eastern European population (South, Centre and North), representing both genders and a range of age groups, as well as ambulance service users and non-users. To incentivise participation, we gave patients £10 of High Street vouchers.

Ethical considerations

After agreeing a date, time and location, all staff participants then received by post and email a consent form, demographic questionnaire, participant information sheet and interview schedule. The staff participants had at least one week from receiving the study documentation to seek further clarification or withdraw from the study. Any information given was confidential. We anonymised all quotes to prevent identification. Because some staff interviews took place on NHS premises, we

applied for, and received, ethical approval through the NHS Integrated Research Application System (IRAS).

For the patient interviewees, we translated the above documentation into Polish or Lithuanian as appropriate. As with their staff counterparts, patient participants were given at least one week to seek clarification about any aspect of the study, including what their involvement would entail, or withdraw. Again, the documentation was sent via email and post. We also protected their rights to anonymity and confidentiality in the same way. None of the patient interviews took place on NHS premises. Therefore, instead, we applied for, and received, ethical approval from the Lincoln Ethics Application System (LEAS) at the University of Lincoln.

At interview, staff and patient participants signed two copies of the consent form (one for them and one for us) and completed the demographic questionnaire. This enabled us to monitor demographic profiles.

Data collection and analysis

VHP, an experienced male researcher with extensive interviewing experience, undertook the 15 staff interviews between March 2018 and January 2019. The 12 patient interviews took place between June 2019 and October 2020. Interviews were, with the participants' consent, digitally audio recorded. Interviews continued until data saturation, when subsequent interviews did not add any new themes (Saunders, et al., 2018, Fusch and Ness, 2015). Staff and patient interviews were semi-structured with topic guides providing an initial framework (Appendix A-C). With their inherently open-ended questions, semi-structured interviews enabled the participants to share their experiences in their own words (Guest, MacQueen, and Namey, 2012; Smith, Flowers, and Larkin, 2009; Bowling, 2002).

While the 15 staff interviews were conducted face-to-face and individually, the patient interviews took place in multiple formats. As with the staff interviews, VHP undertook the patient interviews. Only two of the 12 patient interviews were individual face-to-face. The multiple formats for the patient studies may have influenced any comparisons with the staff interviews. One Lithuanian face-to-face interview involved a couple, as did one Polish interview. Three Lithuanian interviews required a face-to-face interpreter, while one required a telephone interpreter. Four Polish face-to-face interviews required an interpreter. In all instances, the interpreter was informal and were known to the participants. They were not part of the research team. One of the interpreters was medically trained.

We transcribed the interviews semi-non-verbatim. This was because while the quotes captured some of the limited English of the participants, they did not include pauses. VHP coded the interviews thematically in NVivo 12 (QSR International, 2014) using Framework Analysis (FA) (Ritchie, 2003) by VHP. While some codes were deductive a priori, informed by a systematic scoping review (Phung, et al., 2020), we added inductive de novo codes where appropriate (Dixon-Woods, 2011).

The analysis followed five steps consistent with FA (Ritchie and Spencer, 1994; Srivastava and Thompson, 2009). Firstly, familiarisation came primarily through the transcripts and contemporaneous hand-written notes. Subsequently, we transcribed the interviews non-verbatim.

After familiarisation, we then constructed a thematic framework. A systematic scoping review (Phung, et al., 2020) informed the key a priori themes, which guided the interviews (Srivastava and Thompson, 2009). The de novo codes related mainly to perceptions of stereotyping and recommendations for service delivery improvements (Dixon-Woods, 2011).

Subsequent indexing identified the quotes from each transcript corresponding to particular themes using NVivo 12. Finally, we interpreted the data by producing an initial codebook. These themes were refined through subsequent discussions with other members of the research team.

Results

Maximum variation sampling ensured that the 15 staff interviewees covered a range of ages, genders, job roles, lengths of service, locations based, etc. (Table 1). The Duty Operations Manager was also a trained paramedic. Of the 15 participants, two were Eastern European, while the rest were British.

The 12 patient interviewees included participants of Polish and Lithuanian nationality, spread evenly across all three interview sites in Lincolnshire (Table 2). All interviewees were of working age and all but one had lived in the UK for at least five years. Three were non-users, who were compared with ambulance service users. Eight patient interviews had an interpreter present. This largely explained why patient interviews were, generally, longer than staff interviews (Table 3).

The main interview themes common to both staff and patient interviews were: challenging stereotypes; language and communication barriers; and medical travel. For comparative purposes, we also analysed why Eastern Europeans did not use the ambulance service. The staff and patient themes are summarised in thematic maps (Appendix D-E).

Challenging stereotypes

Ambulance staff mostly challenged the hostile Eastern European media stereotypes (Shahvisi, 2019, Eberl, et al., 2018, Schweyher, et al., 2019), although one mentioned "health tourism", which suggests that migrants deliberately exploit state-funded health services (Wadsworth, 2013). This is different to medical travel, where people travel from their country of residence to another country to access medical treatment (Connell, 2013). Staff interviewees generally felt that Eastern Europeans did not burden public services and generally worked hard, with many being underpaid and overqualified (Office for National Statistics ONS 2017c; Office for National Statistics ONS 2017b). They also felt that Eastern Europeans were no more prone to antisocial behaviour than any other group.

"He's come to the UK and phoned an ambulance within 24 hours of being here for a condition that ... the doctors believe he would have

Table 1 Profile of ambulance staff interviewees.

	Number	Percent
Age (years)		_
25-34	3	20
35-44	6	40
45-54	5	33
55-64	1	7
Gender		
Male	13	87
Female	2	13
Job role		
Paramedic	10	67
Emergency Medical Technician (EMT)	2	13
Duty Operations Manager	1	7
Paramedic mentor	1	7
First Response Vehicle (FRV) paramedic	1	7
Length of service (years)		
Less than five	4	27
Between five and 10	3	20
More than 10	8	53
Attendances to Eastern Europeans since Oct	ober 2015	
Less than five	3	20
At least five	12	80
Location base		
Boston	2	13
Bourne	4	27
Bracebridge Heath	5	33
Market Rasen	1	7
Scunthorpe	1	7
Spalding	2	13

Table 2Profile of patient interviewees.

	Number	Percent
Gender		
Male	4	33.3
Female	8	66.7
Location		
North	4	33.3
Central	4	33.3
South	4	33.3
Nationality		
Polish	7	58.3
Lithuanian	5	41.7
Age (years)		
18-24	1	8.3
25-34	4	33.3
35-44	3	25.0
45-54	1	8.3
55-64	3	25.0
Lived in UK (years)		
Less than one	0	0
More than one and less than five	1	8.3
More than five and less than 10	5	41.7
More than 10 and less than 15	6	50.0
Lived in Lincolnshire (years)		
Less than one	0	0.0
More than one and less than five	2	16.7
More than five and less than 10	5	41.7
More than 10 and less than 15	5	41.7
How often used ambulance service sin	ce October 2015	
None	3	25.0
Once	3	25.0
2-4 times	3	25.0
At least five	3	25.0

Table 3Length of staff and patient interviews.

Interview	Staff interviews		Patient interviews			
	Hours	Minutes	Seconds	Hours	Minutes	Seconds
1	0	56	30	1	36	31
2	0	40	20	1	28	22
3	1	12	19	1	39	52
4	0	54	25	2	29	20
5	1	05	44	1	06	15
6	1	03	10	1	18	23
7	0	46	33	1	21	21
8	1	03	51	1	19	05
9	1	07	35	0	47	59
10	0	59	34	1	19	49
11	0	58	59	0	37	53
12	0	55	24	0	52	51
13	1	30	36			
14	0	55	24			
15	1	08	25			
Total	14	56	09	15	57	06
Average	0	59	45	1	19	48

known about for a few years beforehand. Again, this is somebody in their late 30s, early 40s, and cirrhosis of the liver is almost always caused by some sort of alcohol abuse. In the NHS, you get that treated for free.... Health tourism." Staff interview 4 (British, female, 25-34).

"...the amount of people I see up and about in the early hours of the morning on minibuses, walking to work, biking to work. They're not the people I'm going to that have been drinking, that have been fighting." Staff interview 5 (British, male, 25-34, attended to more than five incidents involving Eastern Europeans since October 2015).

"I looked after a group of students from Europe a good number of years ago and they were coming here and they were cropping flowers and soft fruit and so on. They were trying to be doctors, engineers." Staff interview 13 (British, male, 45-54).

Patient participants also robustly challenged the predominantly negative media coverage about Eastern Europeans. They wanted to contribute more to the UK but also wanted fair treatment..

"I don't pay anything there, for Lithuania. I don't contribute to it. I contribute over here. My husband as well, and we do all this treatment and tests. So this is not fair from our...then they say that migrants come and say, 'because of that lot of queues for English people because of us'. But we work. And we then spend for Lithuania, because we can't get proper treatment here." Interpreter (Lithuanian, female, 45-54, ambulance user, South Lincolnshire) in patient interview 3 (Lithuanian, female, 25-34, ambulance user, South Lincolnshire).

Language and communication

Staff and patients agreed that language barriers could impede communication in a fast-moving, potentially life-threatening emergency. Interpreting provision could help with diagnosis and treatment in such situations. As medical terminology is more complex, both groups agreed that medically trained professional interpreters or more ambulance staff who can speak the relevant languages would help.

"Yeah and the patient might give an answer which would prompt us to give another question but because that person might not be medically trained they might not ask that question that we think is quite relevant. Yeah maybe having somebody who translated and had a medical background." Staff interview 4 (British, female, 25-34).

"Medically trained one, yeah?

Probably yeah, because, you know, you need to understand what going to happen with you I know that. Not just translator." Patient interview 12 (Lithuanian, male, 25-34, non-ambulance user, Central Lincolnshire).

One staff interviewee was deterred from using Language Line because, at the time of the interviews, it was a premium rate service on an 0845 number. However, there has been progress on the cost of Language Line since it has transitioned from a premium rate 0845 service then to a free 0800 service now (Whitley, 2022). East Midlands Ambulance Service (EMAS) now pays for Language Line. Therefore, there is no upfront cost to ambulance staff (Whitley, 2022). The cost incurred varies depending on the language used (Spaight, 2022).

"As I say, I've used them in the past and the other issue is it's normally premium number." Staff interview 7 (Eastern European, male, 35-44).

Some staff interviewees expressed concerns about using informal interpreters, especially children, to convey potentially sensitive medical information. Patient interviewees preferred to use informal interpreters.

"...relatives or friends or colleagues. Not...from a confidentiality perspective, is it fair for me to ask if I've got a 16 year-old patient, is it fair for me to ask her parents? ... Or if there's a risk of pregnancy? What are the chances that I might get a skewed answer because of who I'm asking the question through?" Staff interview 5 (British, male, 25-34).

"Yeah, they bring the husband out, and after the examination, they said if she doesn't understand, the husband will translate." Interpreter (Polish, male, 35-44, medical professional, North Lincolnshire) in patient interview 5 (Polish, female, 25-34, ambulance user, North Lincolnshire).

Some patients recommended better technology for translation in the ambulance service. This could include the option to choose the language to translate what call handlers were saying. Patients felt that because smartphones were widely used, translation apps could do this. Staff and

patients both suggested having multi-lingual written communication explaining how to use ambulance or other NHS services.

"But the majority of our frontline staff don't have a work-issued communication device. But they do have the Getacs [a hand held device storing patient and incident details]. Now if that was capable. I don't know if it, but if that was capable of some kind of translation software, that would be potentially spot-on." Staff interview 6 (British, male, 35-44).

"So perhaps, if there was a means of having those [patient care leaflets] in different languages to be able to give to Eastern European patients because I've left Eastern European patients at home because they haven't necessitated ED care...They may read it. They may not. But if they did, it may perhaps then allow them to self-help themselves, self-medicate, particularly in relation to things like paracetamol, which would then free up time for the ambulance service." Staff interview 11 (British, male, 45-54).

"There's so many apps, which can translate for you. Google Translator, you can choose any language to translate into English or any language you want. Everyone has smartphone now." Patient interview 12 (Lithuanian, male, 25-34, non-ambulance user, Central Lincolnshire).

Medical travel

Some ambulance staff felt that medical travel complicated how they delivered prehospital care. Frequent medical travel among Eastern Europeans made it more common for them to encounter foreign medications on-scene. This was more likely for people not registered with a GP. That there is no central database to translate foreign medication into UK equivalents heightened the challenge further.

"So yeah, that's a big issue. 'cause we can't understand their medication that they take and the affect the care we give." Staff interview 13 (British, male, 45-54).

"You'll often come across Eastern Europeans. Depends what you consider to be Eastern Europeans: Latvians, Lithuanians, Poles, Czechs, that aren't registered with GPs and you've got to sort of get them to understand, which with the language makes it awkward that they need to be with a GP if they are going to stay here and sort out their problems like this." Staff interview 14 (British, male, 45-54).

"If all nationalities... if it's something like a national database, which can be accessed through some link. That might help, yeah. One can type that and flush out in English what it is, yeah, yeah." Staff interview 7 (Eastern European, male, 35-44).

By contrast, patients undertook medical travel to overcome perceived problems in the NHS. They were used to having Emergency Physicians on ambulances, who could prescribe them painkillers. However, the default position of the ambulance service was not to give them antibiotics. They were also dissatisfied with paracetamol seemingly being the default painkiller prescribed by the ambulance service. Patients also perceived the medication to be cheaper back in their homeland.

"...they expect the antibiotics in this country despite us trying to avoid you using them where it's not appropriate. We, the expectations is that we're gonna give them antibiotics." Staff interview 13 (British, male, 45-54).

"So it's...and yeah...you're right, they do go back and they do collect their own medication because it's cheaper." Staff interview 2 (British, male, 55-64,).

"Exactly, now but when we came, we were making jokes that paracetamol in this country can cure even cancer!" Patient interview 10

(Lithuanian, male, 55-64, non-ambulance user, Central Lincolnshire).

Dissatisfaction with longer waiting times in the UK, limited availability of antibiotics, as well as the competency and duty of care among NHS staff, also drove medical travel. Cheap flights facilitated their ability to travel back to their homeland for medication.

"She says, 'you can ring in Poland with every problem.' With every problems, but in Poland also, we've got the doctors in the ambulances, and the doctor can tell you, you know...of course if it's nothing, they can give you some injection, you know, and leave you at home." Interpreter (Polish, male, 35-44, medical professional, North Lincolnshire) in patient interview 5 (Polish, female, 25-34, ambulance user, North Lincolnshire).

"We come back. From Lithuania, we have always our reserves. We go to our friends, 'do you have antibiotics?' 'Yes I do' Because from English doctors, we can't get or they don't think that they need everything that we need. So we treat our families ourselves and I think that we're better doctors, to be honest." Patient interview 4 (Lithuanian, female, 45-54, ambulance user, South Lincolnshire).

Why not use the ambulance service?

To be inclusive, we examined the experiences of non-users of the ambulance. The main reasons given for not using the ambulance service centred on convenience, understanding that the situation was not serious enough to warrant an ambulance response. One patient did not call an ambulance because they preferred face-to-face contact in hospital.

Patient: "Or if she tripped that badly that her [] would be in danger. Something that I could actually help her more by taking her than..." Interviewer: "Because you made a judgement that it was bad but it wasn't like, really bad."

Patient: "Bad, bad but could be, could be worse." Patient interview 9 (Polish, female, 35-44, non-ambulance user, NHS employee, Central Lincolnshire).

"I asked, 'when you no have ambulance, she still fit, it's my wife, you know, keeping my daughter in her hands.' We go straight away hospital. They ring to hospital. We come. When we come to emergency, they know everything, wait for us. So it's for me, you know, I no live very from hospital. It's six minutes, so it's easy for me." Patient interview 8 (Polish, male, 35-44, ambulance user, North Lincolnshire).

"...then go from there because then you're talking eye-to-eye. You could explain. You could show what's wrong with you. If you're going to ring the ambulance, you don't what to say and if they're going to be quick. In English, you're probably not going to understand them at all, you know." Patient interview 12 (Lithuanian, male, 25-34, non-ambulance user, Central Lincolnshire).

Sometimes, patients with limited English were anxious about having to talk to call handlers. Even when there was no language barrier, some patients felt that the questions were not focused on their condition. This subsequently deterred patients from using the ambulance even if they, perhaps, needed it.

"'Sorry, can you help me, M?' 'Can we go to bank together?' You know I say, 'how long you here?' '12 years'. 'Oh sorry'. I say, for example, we talking about this accident or something like that, I say 'How you call the ambulance?' 'Ambulance?, No, we go Emergency' 'We never call ambulance' 'We go Emergency, we not using ambulance.'" Patient interview 8 (Polish, male, 35-44, ambulance user, North Lincolnshire).

"I probably never ring one. Because like I said, when we first came, we didn't speak very well in English." Patient interview 12 (Lithuanian, male, 25-34, non-ambulance user, Central Lincolnshire).

Interviewee: "I know that they have to follow, like a script."

Interviewer: "Yeah."

Interviewee: "So some of the questions, you know, are completely

not 'are her lips dry?'" Interviewer: "Yeah."

Interviewee: "Or something like that. We're talking like 'why are you

asking me?" [laughs]. Interviewer: "Yeah."

Interviewee: "So sometimes I'm guessing that that can be for people a bit they don't why they asking those questions." Patient interview 11 (Lithuanian, female, 25-34, non-ambulance user, Central

Lincolnshire).

Discussion

Main findings

Staff interviewees mostly challenged media stereotypes about antisocial behaviour among Eastern Europeans. Patient interviewees perceived unfairness and unequal treatment towards them from health service providers, including ambulance services. They felt this was partly because they were Eastern Europeans living in the post-Brexit UK.

Limited English sometimes compounded a lack of understanding of how the NHS worked. Variable provision and quality of interpreting services reinforced this disadvantage.

Patients often maintained links with their homeland through medical travel, which may have inhibited their ability to acculturate or anchor roots in the host country. This may have impeded their ability to navigate the NHS. Medical travel also posed challenges for ambulance staff when encountering foreign medication.

Some patients did not use the ambulance service because they were anxious about conversing with call handlers. Some felt that call handlers' questions were not focused. Others felt that their situation was not serious enough to warrant an ambulance response. One patient preferred to explain face-to-face at the hospital.

Relationship to previous research

Challenging stereotypes

Lincolnshire's large rural agricultural and service sectors attracted significant Eastern European migration following EU Accession. Hostile media coverage portrayed this increased migration as a burden on public services (Shahvisi, 2019; Eberl, et al., 2018; Schweyher, et al., 2019).

Ambulance staff interviewees encountered Eastern European migrants working in challenging jobs for which they were overqualified (Office for National Statistics ONS 2017c; Office for National Statistics ONS 2017b), getting up early to go to work, and not burdening Accident and Emergency (A&E) departments (Shahvisi, 2019; Oliver, 2018). Patient interviewees also robustly challenged negative media stereotypes.

The lack of clarity about post-Brexit entitlements in the UK and the Hostile Environment contributed to feelings of unequal treatment. This is despite the 2010 Equality Act (Her Majesty's Government, 2010) and the Equality Delivery System in the NHS (NHS, 2012; NHS, 2013).

Using the Andersen definition from 2014, access means "getting the right healthcare services at the right time" (Andersen and Davidson, 2014). Some patients perceived unequal treatment, in terms of discrimination on nationality grounds rather than equity. This suggests that they were not accessing healthcare in a way that met their needs and were dissatisfied with services (Penchansky and Thomas, 1981).

Despite the small impact of "health tourism" (Oliver, 2018), Hostile Environment policies (Shahvisi, 2019; Burrell and Schweyher, 2019) identified it as a problem and restricted access to local services, including ambulance care, to which some migrants were entitled.

Language and communication

Limited language competency and understanding of the healthcare system, as well as limited awareness of free NHS interpreting provision (Saurman, 2015; Blay, et al., 2018), were individual level barriers to accessing healthcare. Insufficient information in relevant languages as well as variable quality and availability of interpreting services were provider and system level barriers that mediated access (Scheppers, et al., 2006).

Variable quality and provision of interpreting services (Jayaweera, 2021; Straiton and Myhre, 2017) poses challenges for both ambulance staff and the patients. Limited access to interpreters may be because of limited availability (Gerrish, et al., 2004; Gill, et al., 2009), awareness (Saurman, 2015), accessibility (Penchansky and Thomas, 1981) or a combination of all three.

Medical travel

Eastern European migrants, perhaps through push factors, such as limited availability of painkillers, longer waiting times, dissatisfaction with healthcare staff (Madden, et al., 2017;, Madden, et al., 2014; Osipovic, 2013), often returned home for medication and/or treatment. Low-cost travel facilitated this. Medical travel also suggested an uneasy fit between healthcare service providers and Eastern European patients.

When Eastern European migrants undertook medical travel, they used their lay referral network (Freidson, 1960) to access healthcare services in their home country and language. They often combined this with visits to family and friends (Main, 2014; Sime, 2014; Horsfall, 2019).

Frequent medical travel can inhibit their ability to acculturate (Fox, Thayer, and Wadhwa, 2017) and anchor roots in the host country (Grzymala-Kazlowska, 2018). Acculturation is about how migrant communities adjust to the host country (Fox, Thayer, and Wadhwa, 2017). It is not assimilation, wherethey suppress their cultural identity to adopt the cultural norms of the host country (Wen, 2019). This also impedes their ability to understand and navigate the healthcare system in the host country.

Not using the ambulance service

Not using an ambulance was not always due to a limited understanding. A good understanding of the healthcare system, as well as language competence can facilitate appropriate use of healthcare services. This sometimes meant bypassing the ambulance service.

Some patient interviewees felt that some questions from call handlers was unfocused and not relevant to their condition. Call handlers could perhaps focus their questions more to the patient's condition, but there are standard questions that they are required to ask in order to triage (Yorkshire Ambulance Service (YAS), 2021; West Midlands Ambulance Service (WMAS) University NHS Foundation Trust, 2021).

Strengths and limitations

Among staff interviewees, there was a clear gender imbalance. This may have influenced the nature of the findings. On the patient side, we sampled the largest Eastern European communities in Lincolnshire, at the expense of smaller ones. Salient issues in this study, based as it is in a predominantly rural county, may not be as relevant in different types of locations.

Implications for research, policy, and practice

Future studies could supplement the views of frontline ambulance staff with control room staff, CFRs, service providers and policy-makers,

and healthcare interpreters to provide a more holistic ambulance service experience of attending to Eastern European migrants. Incorporating these primary care staff perspectives would link the perspectives of staff from primary care to those in pre-hospital care and those working in the ED to cover all aspects of the patient journey.

To achieve a broader patient perspective, perhaps PPI representatives could have been interviewed, since they advocate for patients. Similarly, community organisations, with their understanding of nationality or migrant groups, could be included in future research.

EU nationals living in the UK before 31 December 2020, had to apply for settled status to continue to access free healthcare, including ambulance services. There were concerns about the difficulty in getting applications processed (Clay, Denselow, and Gripper, 2019; O'Carroll, 2018; Sumption and Fernandez-Reino, 2020). Consequently, some Eastern Europeans who would have been eligible for free healthcare, may not be in future.

Information in Eastern European languages, can also be distributed to community hubs, for example, community centres, libraries, or churches. (Osipovic, 2013). The ambulance service can also engage Eastern European communities face-to-face through public meetings or through traditional and social media.

Raising awareness of interpreting services would also help patients make informed healthcare decisions (Saurman, 2015). Revising protocols to allow medically trained Eastern European ambulance staff to undertake interpretation in emergencies could facilitate this.

Conclusion

Language and communication barriers can impede patient-staff dialogue in time-critical emergencies. While staff preferred to use professional interpreters to overcome language barriers, patients preferred informal interpreters, which may contravene ambulance service guidelines. There also needs to be information about how the NHS works in the relevant languages.

Frequent medical travel increases the likelihood that ambulance staff will encounter foreign medication. This can complicate their ability to deliver prehospital care. Medical travel also limits patients' ability to acculturate, anchor, and navigate their way around the NHS.

This may, in turn, lead to differences between their expectations and experiences of the ambulance service for Eastern European patients. Limited understanding of how the NHS works may sometimes lead to them using the ambulance service for primary care conditions. Improving GP registration could therefore reduce inappropriate use of ambulance services.

Declarations

Ethical approval

The Health Research Authority (HRA), through the NHS Integrated Research Application System (IRAS) (213939), granted ethical approval for the staff interview study. East Midlands Ambulance Service (EMAS) NHS Trust also approved the interview study. The Lincoln Ethics Application System (LEAS) provided ethical approval for the patient interviews. The research conformed to all the relevant guidelines and regulations.

Consent for publication

Not applicable.

Availability of data and materials

The data comes entirely from qualitative interviews. The current study did not generate any datasets for analysis.

Funding

The Central Funding Scheme at the University of Lincoln supported this study. They had no role in study design, collection, analysis or interpretation of data. Nor were they involved in the writing and the submission of the article for publication.

Authors' contributions

The authors' contributions meet The International Committee of Medical Journal Editors (ICMJE) criteria for authorship. VHP and ANS formulated the idea for the interview study. VHP undertook the interviews with ambulance staff and patients, as well as writing the paper. VHP produced the initial set of interview codes. VHP discussed with ANS, ZA, and SA to refine and finalise the codes. SA advised on the theoretical basis for the study. ANS, ZA, and SA commented on the manuscript content. All authors reviewed the manuscript and approved it for submission.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors would like to thank East Midlands Ambulance Service NHS Trust (EMAS) for helping to recruit staff participants. They would also like to thank the Study Review Group at the Community and Health Research Unit (CaHRU) at the University of Lincoln for their comments.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.jmh.2022.100133.

References

- Andersen, A., Davidson, P., 2014. Improving access to care in America: individual and contextual indicators. In: Kominski, G. (Ed.), Changing the US Healthcare System: Key Issues in Health Services Policy and Management. Jossey Bass, San Francisco, pp. 3–31.
- Andersen, R., 1968. A Behavioral Model of Families' Use of Health Services. University of Chicago. Chicago. USA.
- Aspers, P., Corte, U., 2019. What is qualitative in qualitative research? Qual. Sociol. 42 (2), 139–160. https://doi.org/10.1007/s11133-019-9413-7.
- Bhandari, R., Kasim, A., Warren, J., et al., 2017. Geographical inequalities in health in a time of austerity: baseline findings from the Stockton-on-Tees cohort study. Health Place 48 (1), 111–122. https://doi.org/10.1016/j.healthplace.2017.10.002.
- Blay, N., Ioannou, S., Sermetkosa, M., et al., 2018. Healthcare interpreter utilisation: analysis of health administrative data. BMC Health Serv. Res. 18 (348) https://doi. org/10.1186/s12913-018-3135-5.
- Bonevski, B., Randell, M., Paul, C., et al., 2014. Reaching the hard-to-reach: a systematic review of strategies for improving health and medical research with socially disadvantaged groups. BMC Med. Res. Methodol. 14 (42), 1–29. https://doi.org/10.1186/1471-2288-14-42.
- Bowling, A., 2002. Unstructured interviews. In: Bowling, A. (Ed.), Research Methods in Health: Investigating Health and Health Services. Open University Press, Maidenhead, UK, pp. 378–393.
- Burrell, K., Schweyher, M., 2019. Conditional citizens and hostile environments: Polish migrants in pre-Brexit Britain. Geoforum 106, 193–201. https://doi.org/10.1016/j. geoforum.2019.08.014.
- Castaneda, H., Holmes, S., Madrigal, D., et al., 2015. Immigration as a social determinant of health. Annu. Rev. Public Health 36, 375–392. https://doi.org/10.1146/annurevpublhealth-032013-182419.
- Clay, T., Denselow, S., Gripper, R., 2019. Settled Status: What Level of Take-Up Can We Expect? The Transition Advice Fund, London.
- Collis, A., Stott, N., Ross, D., 2010. Workers on the Move 3: European Migrant Workers and Health in the UK - The Evidence. Keystone Development Trust, Thetford, Norfolk, UK, p. 116.
- Connell, J., 2013. Contemporary medical tourism: conceptualisation, culture and commodification. Tour Manag. 34, 1–13. https://doi.org/10.1016/j.tourman.2012.05.009.

- Crede, S., Such, E., Mason, S., 2017. International migrants' use of emergency departments in Europe compared with non-migrants' use: a systematic review. Eur. J. Public Health 28 (1), 61–73. https://doi.org/10.1093/eurpub/ckx057.
- Crenshaw, K., 1989. Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Anti-Discrimination Doctrine, Feminist Theory and Antiracist Politics, 1989. University of Chicago Legal Forum, pp. 139–167.
- Creswell, J., Plano Clark, V., 2011. Designing and conducting Mixed Methods Research, Second ed. Sage, London.
- Dixon-Woods, M., 2011. Using framework-based synthesis for conducting reviews of qualitative studies. BMC Med. 9 (39) https://doi.org/10.1186/1741-7015-9-39.
- Eberl, J., Meltzer, C., Heidenreich, T., et al., 2018. The European media discourse on immigration and its effects: a literature review. Ann. Int. Commun. 42 (3), 207–223. https://doi.org/10.1080/23808985.2018.1497452.
- Fletcher, A., 2017. Applying critical realism in qualitative research: methodology meets method. Int. J. Soc. Res. Methodol. 20 (2), 181–194. https://doi.org/10.1080/ 13645579.2016.1144401.
- Fox, M., Thayer, Z., Wadhwa, P., 2017. Acculturation and health: The moderating role of sociocultural context. Am. Anthropol. 119 (3), 405–421. https://doi.org/10.1111/
- Freidson, E., 1960. Client control and medical practice. Am. J. Sociol. 65 (4), 374–382. https://doi.org/10.1086/222726.
- Frenk, J., 1992. The concept and measurement of accessibility. In: White, K. (Ed.), Health Services Research: an Anthology. Pan-American Health Organization, Washington DC, USA, pp. 841–855.
- Fusch, P., Ness, L., 2015. Are we there yet? Data saturation in qualitative research. Qual. Rep. 20 (9), 1408–1416. https://doi.org/10.46743/2160-3715/2015.2281.
- Gerrish, K., Chau, R., Sobowale, A., et al., 2004. Bridging the language barrier: the use of interpreters in primary care nursing. Health Soc. Care Community 12 (5), 407–413. https://doi.org/10.1111/j.1365-2524.2004.00510.x.
- Gill, P., Shankar, A., Quirke, T., et al., 2009. Access to interpreting services in England: secondary analysis of national data. BMC Public Health 9 (12), 1–4. https://doi.org/ 10.1186/1471-2458-9-12.
- Gkiouleka, A., Huijts, T., Beckfield, J., et al., 2018. Understanding the micro and macro politics of health: Inequalities, intersectionality & institutions A research agenda. Soc. Sci. Med. 200, 92–98. https://doi.org/10.1016/j.socscimed.2018.01.025.
- Grzymala-Kazlowska, A., 2018. From connecting to social anchoring: adaptation and 'settlement' of Polish migrants in the UK. J. Ethn. Migr. Stud. 44 (2), 252–269. https://doi.org/10.1080/1369183X.2017.1341713.
- Guest, G., MacQueen, K., Namey, E., 2012. Introduction to applied thematic analysis. In: Guest, G., MacQueen, K., Namey, E. (Eds.), Applied Thematic Analysis. Sage,
- Thousand Oaks, California, USA, pp. 3–20.

 Health and Well-being Suffolk, 2015. Migrants from Eastern Europe. Suffolk County Council. Inswich. UK.
- Her Majesty's Government, 2010. Equality Act 2010. HMSO, United Kingdom.
- Horsfall, D., 2019. Medical tourism from the UK to Poland: how the market masks migration. J. Ethn. Migr. Stud. 46 (20), 4211–4229. https://doi.org/10.1080/ 1369183X.2019.1597470.
- Jayaweera, H., 2021. Migrant diversity and determinants of health care access and use. J. Health Serv. Res. Policy 26 (1), 1–2. https://doi.org/10.1177/ 1355819620976272.
- Kim, H., Sefcik, J., Bradway, C., 2017. Characteristics of qualitative descriptive studies: a systematic review. Res. Nurs. Health 40 (1), 23–42. https://doi.org/10.1002/ pur. 21768
- Leaman, A., Rysdale, E., Webber, R., 2006. Use of the emergency department by Polish migrant workers. Emerg. Med. J. 23 (12), 918–919. https://doi.org/10.1136/ emi.2006.035980.
- Levesque, J., Harris, M., Russell, G., 2013. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. Int. J. Equity Health 12, 18–26. https://doi.org/10.1186/1475-9276-12-18.
- Lincolnshire Research Observatory, 2013. Country of Birth, Ethnicity and nationality of Lincolnshire Residents, Lincoln, UK.
- Lobe, B., Morgan, D., Hoffman, K., 2020. Qualitative data collection in an era of social distancing. Int. J. Qual. Methods 19 (July), 1–8. https://doi.org/10.1177/ 1609406920937875.
- Lundin, C., Hadziabdic, E., Hjelm, K., 2018. Language interpretation conditions and boundaries in multilingual and multicultural emergency healthcare. BMC Int. Health Hum. Rights 18 (23), 1–14. https://doi.org/10.1186/s12914-018-0157-3.
- Madden, H., Harris, J., Blickem, C., et al., 2017. Always paracetamol, they give them paracetamol for everything": a qualitative study examining Eastern European migrants' experiences of the UK health service. BMC Health Serv. Res. 17 (604), 1–10. https://doi.org/10.1186/s12913-017-2526-3.
- Madden, H., Harris, J., Harrison, R., et al., 2014. A Targeted Health Needs Assessment of the Eastern European Population in Warrington: Final Report. Centre for Public Health at Liverpool John Moores University, Liverpool, UK.
- Main, I., 2014. Medical travels of Polish female migrants in Europe. Sociol. Cas. 50 (6), 897–918. https://doi.org/10.13060/00380288.2014.50.6.147.
- Marmot, M., 2010. Fair society, Healthy Lives: Strategic Review of Health Inequalities in England Post-2010, London.
- Marmot, M., Allen, J., Goldblatt, P., et al., 2020. Build Back Fairer: The Covid-19 Marmot Review - The Pandemic, Socioeconomic and Health Inequalities in England. The Health Foundation, London.
- NHS, 2012. The Equality Delivery System for the NHS Making Sure Everyone Counts. NHS, London.
- NHS, 2013. A refreshed Equality Delivery System for the NHS: EDS 2 Making Sure Everyone Counts. NHS, London.

- O'Brien, P., Tribe, R., 2014. Exploring Polish migrants' adaptation to life in the UK: an interpretative phenomenological analysis. Int. J. Cult. Ment. Health 7 (4), 439–451. https://doi.org/10.1080/17542863.2013.844185.
- O'Carroll, L., 2018. Concerns for Eastern Europeans in Brexit 'settled status' plan. The Guardian. The Guardian, London.
- Office for National Statistics (ONS), 2017b. Living Abroad: Dynamics of Migration Between the UK and the EU2. Office for National Statistics (ONS), London.
- Office for National Statistics (ONS), 2017c. Living Abroad: Migration Between Britain and the EU8. Office for National Statistics (ONS), London.
- Office for National Statistics (ONS), 2017a. Population of the UK by Country of Birth and Nationality. Office for National Statistics (ONS), London.
- Oliver, D., 2018. David Oliver: Health tourism, immigration, and the NHS. BMJ 361. https://doi.org/10.1136/bmj.k2536.
- Osipovic, D., 2013. 'If I get ill, it's onto the plane, and off to Poland.' Use of health care services by Polish migrants in London. Cen. East. Eur. Migr. Rev. 2 (2), 98–114.
- Patel, J., 2011. Understanding the health needs of Central and Eastern European migrants in Hertfordshire.
- Palinkas, L., Horwitz, S., Green, C., et al., 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Adm. Policy. Ment. Health 42 (5), 533–544. https://doi.org/10.1007/s10488-013-0528-y.
- Penchansky, R., Thomas, J., 1981. The concept of access: definition and relationship to consumer satisfaction. Med. Care 19 (2), 127–140. https://doi.org/10.1097/ 00005650-198102000-00001.
- Phung, V.-H., Asghar, Z., Matiti, M., et al., 2020. Understanding how Eastern European migrants use and experience UK health services: a systematic scoping review. BMC Health Serv. Res. 20 (173), 1–10. https://doi.org/10.1186/s12913-020-4987-z.
- QSR International, 2014. NVivo 11 Pro for Windows. QSR International, London.
- Rahman, S., Tuckerman, L., Vorley, T., et al., 2021. Resilient research in the field: Insights and lessons from adapting qualitative research projects during the Covid-19 pandemic. Int. J. Qual. Methods 20 (May), 1–16. https://doi.org/10.1177/ 16094069211016106.
- Ricketts, T., Goldsmith, L., 2005. Access in health services research: the battle of the frameworks. Nurs. Outlook 53 (6), 274–280. https://doi.org/10.1016/j. outlook.2005.06.007.
- Ritchie, J., 2003. The applications of qualitative methods to social research. In: Ritchie, J., Lewis, J. (Eds.), Qualitative Research Practice: A Guide for Social Science Students and Researchers. Sage, London, pp. 24–46.
- Ritchie, J., Spencer, L., 1994. Qualitative data analysis for applied policy research. In: Bryman, A., Burgess, R. (Eds.), Analysing Qualitative Data. Routledge, London, pp. 173–194.
- Saunders, B., Sim, J., Kingstone, T., et al., 2018. Saturation in qualitative research: exploring its conceptualization and operationalization. Qual. Quant. 52 (4), 1893–1907. https://doi.org/10.1007/s11135-017-0574-8.
- Saurman, E., 2015. Improving access: modifying Penchansky and Thomas's theory of access. J. Health Serv. Res. Policy 21 (1), 36–39. https://doi.org/10.1177/1355819615600001.
- Scheppers, E., van Dongen, E., Dekker, J., et al., 2006. Potential barriers to the use of health services among ethnic minorities: a review. Fam. Pract. 23 (3), 325–348. https://doi.org/10.1093/fampra/cmil13.
- Schweyher, M., Odden, G., Burrell, K., 2019. Abuse or underuse? Polish migrants' narratives of (not) claiming social benefits in the UK in times of Brexit. Cen. East. Eur. Migr. Rev. 8 (2), 101–122. https://doi.org/10.17467/ceemr.2019.10.
- Shahvisi, A., 2019. Austerity or xenophobia? The causes and costs of the "Hostile Environment" in the NHS. Health Care Anal. 27 (3), 202–219. https://doi.org/10.1007/s10728-019-00374-w.
- Silverman, D., Selecting a Case in Doing Qualitative Research, D. Silverman,. 2010, Sage Publications Ltd: London. p. 137-151.
- Sime, D., 2014. I think that Polish doctors are better': newly arrived migrant children and their parents' experiences and views of health services in Scotland. Health Place 30, 86–93. https://doi.org/10.1016/j.healthplace.2014.08.006.
- Smith, J., Flowers, P., Larkin, M., 2009. Interpretative Phenomenological Analysis: Theory, Method and Research. Sage, London.
- Spaight, R., Language Line, V.-H. Phung, 2022, University of Lincoln: Lincoln, UK. Srivastava, A., Thompson, S., 2009. Framework analysis: a qualitative methodology for applied policy research. J. Admin. Govern. 4 (2), 72–79.
- Straiton, M., Myhre, S., 2017. Learning to navigate the healthcare system in a new country: a qualitative study. Scand. J. Prim. Health Care 35 (4), 352–359. https:// doi.org/10.1080/02813432.2017.1397320.
- Sumption, M., Fernandez-Reino, M., 2020. Unsettled Status 2020: Which EU Citizens are at Risk of Failing to Secure their Rights After Brexit? The Migration Observatory, University of Oxford, Oxford, UK.
- Tobi, P., Sheridan, K., Lais, S., 2010. Health and Social Care Needs Assessment of Eastern European (including Roma) Individuals Living in Barking and Dagenham: Final Report. Institute for Health and Human Development at University of East London, London.
- Torrentira Jr, M., 2020. Online data collection as adaptation in conducting quantitative and qualitative research during the Covid-19 pandemic. Eur. J. Educ. Stud. 7 (11), 78–87. https://doi.org/10.46827/ejes.v7i11.3336.
- Vargas-Silva, C., Walsh, P., 2020. EU Migration to and from the UK, Third Revision. Migration Observatory, Oxford, UK, p. 13.
- Wadsworth, J., 2013. Mustn't grumble: Immigration, health and health service use in the UK and Germany. Fisc. Stud. 34 (1), 55–82. https://doi.org/10.1111/j.1475-5890.2013.00177.x.
- Walker, T., 2017. Approaches to critical realism: Bhaskar and Lonergan. J. Crit. Realism. 16 (2), 111-127. https://doi.org/10.1080/14767430.2017.1288062.

Wen, T., 2019. Spatial assimilation. In: Orum, A. (Ed.), Wiley-Blackwell Encyclopedia of Urban and Regional Studies. Wiley & Sons: Hoboken, New Jersey, USA, pp. 1-6.

West Midlands Ambulance Service (WMAS) University NHS Foundation Trust, 2021. What Happens When You Call 999? [Accessed 04 March 2021]. Web page]. Available from: https://wmas.nhs.uk/advice-resources/calling-999/

Whitley, G., Language Line, V.-H. Phung,. 2022, University of Lincoln: Lincoln, UK.

Yakubu, A., Muyundo, J., Brough, G., et al., 2018. Asylum Seeker, Refugee and Migrant

Health, Nottingham, UK. Nottingham City Council, Nottingham, UK. Yorkshire Ambulance Service (YAS), 2021. What Happens When You Call 999? [Accessed 03 April 2021]. Available from: https://www.yas.nhs.uk/our-services/emergency-ambulance-service-999/what-happens-when-you-call-999/.