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On race and ethnicity during a global pandemic: An 'imperfect mosaic' of maternal and child health services in ethnically-diverse South London, United Kingdom

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Summary

Background The SARS-CoV-2 pandemic has brought racial and ethnic inequity into sharp focus, as Black, Asian, and Minority Ethnic people were reported to have greater clinical vulnerability. During the pandemic, priority was given to ongoing, reconfigured maternity and children's healthcare. This study aimed to understand the intersection between race and ethnicity, and healthcare provision amongst maternity and children's healthcare professionals, during the SARS-CoV-2 pandemic.

Methods A qualitative study consisting of semi-structured interviews (N = 53) was undertaken with maternity (n = 29; August-November 2020) and children's (n = 24; June-July 2021) healthcare professionals from an NHS Trust in ethnically-diverse South London, UK. Data pertinent to ethnicity and race were subject to Grounded Theory Analysis, whereby data was subjected to iterative coding and interpretive analysis. Using this methodology, data are compared between transcripts to generate lower and higher order codes, before super-categories are formed, which are finally worked into themes. The inter-relationship between these themes is interpreted as a final theory.

Findings Grounded Theory Analysis led to the theory: An 'Imperfect Mosaic', comprising four themes: (1) 'A System Set in Plaster'; (2) 'The Marginalised Majority'; (3) 'Self-Discharging Responsibility for Change-Making'; and (4) 'Slow Progress, Not No Progress'. The NHS was observed to be brittle, lacking plasticity to deliver change at pace. Overt racism based on skin colour has been replaced by micro-aggressions between in-groups and out-groups, defined not just by ethnicity, but by other social determinants. Contemporaneously, responsibility for health, wellbeing, and psychological safety in the workplace is discharged to, and accepted by, the individual.

Interpretation Our findings suggest three practicable solutions: (1) Representation of marginalised groups at all NHS levels; (2) Engagement in cultural humility which extends to other social factors; and (3) Collective action at system and individual levels, including prioritising equity over simplistic notions of equality.

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Abbreviations: Brexit, The Withdrawal of the United Kingdom from the European Union; NHS, National Health Service; PPIE, Patient and Public Involvement and Engagement; RCM, Royal College of Midwives; RCOG, Royal College of Obstetricians and Gynaecologists; SARS-CoV-2, Severe Acute Respiratory Syndrome Coronavirus 2 (a.k.a. COVID-19); UK, United Kingdom

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Research in context

Evidence before the study

We searched Google Scholar and the database of PIVOT-AL: 'Parent-Infant coVid OrganisaTional Academic Learning collaborative' for work published on the SARS-CoV-2 pandemic and race and ethnicity in maternity care and children's health, using terms such as "SARS-CoV-2" or "COVID-19", "Race" or "Ethnicity", and "Maternity" or "Children's Health". No qualitative research had been published.

Added value of the study

We utilised a rigorous qualitative methodology to analyse data about racial and ethnic inequity amongst maternity and children's healthcare professionals from a South London NHS Trust, during the SARS-CoV-2 pandemic. Analysis led to the emergence of a theory: An 'Imperfect Mosaic', comprising four themes.

Implications of all the available evidence

We know racial and ethnic inequity has plagued The NHS, and little positive change has been evidenced. Modern public health and socio-political shocks to the health system such as the SARS-CoV-2 pandemic have provided a new lens with which to view race and ethnicity, whilst exacerbating racial and ethnic disparity amongst patients and healthcare professionals. We drew conclusions from our findings in relation to existing theories of moral injury, including: cultural humility and obstacles to emotional health in healthcare. We found the NHS to be a system lacking the flexibility to action change at pace and the plasticity to absorb cultural shifts brought about by health system shocks. Further, we explain modern-day racial and ethnic inequity as having changed from the overt racism of the past, to more subtle micro-aggressions which mirror societal discourse, creating a culture of in-groups and out-groups, which intersect race, ethnicity, class, privilege, Britishness, and for medical staff, training pedigree. Our conclusions are drawn with three practicable solutions for encouraging positive change.

Introduction

Racial and ethnic inequity existed long before the creation of The NHS and persists to the present day. What troubles so many, is that the NHS — which at its core and in its constitution — has the principle to provide treatment and care to those who need it, at the point of use, regardless of colour or creed, is itself, so plagued by accusations and evidence of structural and systemic racism.[1–4]

More contemporary writings demonstrate little positive change within the NHS.[5–8] Moreover, issues of racial and ethnic disparity have been further exposed and exacerbated due to major socio-political events such as 'Brexit',[9,10] and more recently, the SARS-CoV-2, novel coronavirus, or COVID-19 outbreak. Identified as a 'Public Health Emergency of International Concern' on 30 January 2020 and classified a pandemic on 11 March 2020,[11] SARS-CoV-2 has provided a new lens through which to view race and ethnicity within UK healthcare.[12–14]

Healthcare services required significant reconfiguration to reduce risk of exposure to patients and healthcare professionals, and redirect resources for the pandemic and the most urgent care. Maternity and children's (neonatal/paediatric) healthcare have been unique throughout the pandemic, due to the inability to delay the provision of services in the way many non-urgent and/or elective procedures were. Early evidence suggested pregnant and postpartum women and their babies might be at increased risk of infection, resulting in The RCOG and The RCM leading a consortium for the development of guidance, recommending how services and care should be reconfigured.[15] Guidelines prioritised pregnant women, babies, and children,[16] whilst attempting to reduce infectious exposure to both them, and staff.

For frontline healthcare professionals, service reconfiguration included suspension of services (e.g., home-births); rapid implementation of virtual care; re-purposing physical hospital space; re-deployment of staff (to support 'COVID wards'); changing rotational working patterns; and restrictions on birth partner presence.[17] Research in the UK has frequently reported negative appraisal of these service reconfigurations by perinatal women.[18–21] Similarly, changes to children's healthcare have been repeatedly raised as points of concern.[22–25]

Whilst the final toll to population health and public life is yet to be calculated, the unprecedented pandemic has also exacerbated existing racial and ethnic tensions within the NHS. These have been coupled with new tensions for both healthcare users and providers, arising from the virus disproportionately affecting Black, Asian, and Minority Ethnic groups,[26–28] and vaccine hesitancy

amongst ethnic minorities,[29] illustrating a continued mistrust in the NHS.

Little evidence exists documenting the experiences of frontline maternity and children's healthcare professionals about their experiences of providing care in the NHS during the pandemic, particularly the intersection between race and ethnicity, and healthcare provision. To address this knowledge gap, we report an analysis of interview data from 53 NHS staff working in maternity and children's healthcare services in ethnically-diverse South London, United Kingdom (UK).

Methods

We employed a qualitative research design,[30,31] to explore race and ethnicity as *"culturally situated problems"*.[32] We undertook interviews to allow expression of experiential data, whilst considering the psychosocial interplay between healthcare professional interviewees (micro-level), the hospital Trust within which they worked (meso-level), and the NHS and professional bodies to which they belong (macro-level). The desire to collect experiential data and the 'lived experiences' from individuals, as well as about these layered levels of complexity, lends itself to qualitative research, in a way quantitative data would otherwise not capture.

Adopting a post-positivist research paradigm,[33] our philosophical underpinning embraced the principle that the knowledge we acquire may be fallible (critical realist ontology), but even the acquisition of 'false knowledge' brings us closer to the truth (objectivist epistemology).[34] We therefore assumed a lifecourse analysis approach, recognising that experiences are interpreted through social contexts and will affect how the lifecourse is navigated in the future,[35] but can be accepted as 'lived realities' or 'truths'.[36] Our researcher positionality was of an objective-outsider/subjective-spectator *within* the data with an empathic reflexive judgement *about* the data; given that some researchers were practicing clinicians at the time of data collection, and the majority of authors identify as non-White British.

The study was undertaken as a service evaluation across a maternity and children's services in South London, United Kingdom. Trust-level approvals were received for interviews in maternity (ref:−11046; July 2020) and children's services (ref:−12421; June 2021). Throughout the planned work, advice was sought from lay and expert stakeholders, through six PPIE events (July 2020 to December 2021) where those with lived experience, health and social care professionals, researchers, and policy makers provided feedback on recruitment, study design, and interpretation of findings.

Recruitment, participants, and procedure

Staff were invited to interview via directorate-wide e-mails providing the academic research team contact details. A critical case purposeful sampling technique,[37] encouraged recruitment variation (e.g., in professional roles or seniority) within the bounded setting of an NHS Trust. Expressions of interest and interviews were conducted by academic (non-Trust employed) researchers [SAS/KDB/OT]. Respondents were informed that anonymous data would be reported in scholarly output and shared with the Trust, but were assured of their anonymity, and asked to confirm their willingness to participate at the beginning of each interview.

Respondents (N = 53) were interviewed in August-November 2020 (maternity services; n = 29), and June-July 2021 (children's services; n = 24). All those from maternity services, and all but two from children's services, who expressed interest in being interviewed took part. Semi-structured interviews[38] were undertaken via video-conferencing, given social distancing requirements, and recorded.[39] Full demographic information is available in Table 1. A core set of questions were asked, with enough flexibility to follow-up personal experiences in more detail (*see Supplementary Files 1 & 2*). Interviews ranged from 26 to 79min (M_{Time}=45 *min*), were recorded, audio-transcribed, and anonymised. Analyses were not subject to 'member-checking' by respondents, but they were able to review their transcripts and redact any comments they wished to prior to analyses, and findings were presented and commented upon at PPIE events.

Analysis focused on responses to a direct question about race, ethnicity, and the pandemic (*see* Panel 1) which was asked of and answered by all respondents, as well as any other related comments offered voluntarily and spontaneously throughout the interview. These data were identified by two researchers [KDB/OT] and abstracted from all transcripts by one [KDB], rendering a final dataset of approximately 20,000 words. Each extracted set of data was thereafter treated as a separate transcript to allow for ongoing, constant comparison.

Panel 1: Routine question about race and ethnicity, asked of all interviewees

"As you may know, particular groups have been identified at higher risk to COVID-19 than others, such as those members of the Black, Asian, and Minority Ethnic communities. This has led to some people delaying health seeking behaviours, due to fear of diagnosis, stigma of having the virus, and their increased risk of death. Do you believe the Trust has put in sufficient measures to mitigate against this? This can be in terms of encouraging and protecting both women/children in your care, and staff members."

Characteristic	Respondents N=53 (%)	Characteristic	Respondents N=53 (%)
Professional Background		*Age (Mean = 45·4years)*	
Midwifery	12 (22·6)	18-24	0 (0·0)
Nursing	7 (13·2)	25-34	7 (13·2)
Obstetrics	6 (11·3)	35-44	19 (35·8)
Neonatology	6 (11·3)	45-54	19 (35·8)
Health Visiting	6 (11·3)	55-64	8 (15·1)
Paediatrics	5 (9·4)	≥65	0 (0·0)
Other Medical Specialisms (Internal Medicine, Neurology, Cardiology)	4 (7·5)		
Allied Health Professionals (Speech and Language Therapy, Physiotherapy, Occupational Therapy)	3 (5·7)	*Years of Experience at this Trust (Mean = 10·0years)*	
Anaesthesia	2 (3·8)	>5 years	16 (30·2)
Imaging Sciences	1 (1·9)	6-10 years	18 (34·0)
Clerical	1 (1·9)	11-20 years	16 (30·2)
Maintenance/Cleaning/Security	0 (0·0)	21+ years	3 (5·6)
Position		*Redeployed* [b]	
Frontline Clinician	26 (49·0)	Yes	15 (28·3)
Senior Clinician	14 (26·4)	No	38 (71·7)
Clinical Manager	6 (11·3)		
Strategic Leadership	4 (7·5)	*Has had a SARS-CoV-2 Positive Diagnosis* [c]	
Research	2 (3·8)	Yes	13 (24·5)
Administrative	1 (1·9)	No	33 (62·3)
Maintenance/Cleaning/Security	0 (0·0)	Possibly (Unconfirmed)	7 (13·2)
Ethnicity [a]		*Clinically Vulnerable to SARS-CoV-2*	
White (White British, White Irish, White Gypsy/Traveller, White Other)	36 (67·9)	Yes	4 (7·5)
Black (Black African, Black Caribbean, Black Other)	7 (13·2)	No	49 (92·5)
Asian (Bangladeshi, Chinese, Indian, Pakistani, Asian Other)	7 (13·2)		
Mixed (Mixed White/Asian, Mixed White/Black African, Mixed White/ Black Caribbean, Mixed Other)	3 (5·7)	*Clinically Vulnerable Household or Immediate Family Member*	
Other (Arab, Any Other)	0 (0·0)	Yes	9 (17·0)
		No	44 (83·0)
Sex			
Female	46 (86·8)		
Male	7 (13·2)		

***Table 1*: Description of respondents**

[a] Ethnicity was defined by respondents in response to the question: *"Could you tell me the ethnicity with which you identify?" and then grouped according to UK Government population statistics categories.*

[b] Respondents were only deemed to have been redeployed when they had been asked to work in a clinical area where they had not previously worked as part of their contracted role at the Trust, or where their rotational working pattern had been completely re-designed due to SARS-CoV-2 service delivery reconfigurations

[c] Respondents were recorded as 'Possibly (Unconfirmed)' when they believed they had contracted SARS-CoV-2, but never received clinical diagnosis

Grounded Theory Analysis,[40] appropriate for cross-disciplinary health research,[36] was employed, and followed an inductive and iterative process. Initial coding of transcripts was line-by-line, using data to code each sentence, and was conducted by one researcher [TD]. Next, 'focused' coding used more conceptual codes to represent broader trends, and was undertaken by two researchers [KDB/TD]. A third researcher [SAS] merged, split, and arranged focus codes into lower-order themes - 'super-categories'. These were then further collapsed or re-ordered into higher-order 'themes', and a theory was generated based on the relationships held between themes. Each stage of analysis was subject to a 'within-team defence',[36] where codes, super-categories, themes, and theory were interpreted and discussed.

Analysis was consultative and followed a constant comparison method where each new transcript was compared to the last. Recruitment ended when principles of data saturation were met, which we measured on two axes: (i) data saturation,[41] when similar data were collected across most of the dataset, achieved at 18

respondents for maternity and 12 for children's healthcare professionals; and (ii) theoretical saturation,[42] when data-driven themes were adequately supported to form a theory, achieved at 29 and 24 participants, respectively. Saturation occurred with relatively few participants, indicating highly cohesive data[43] and sample size sufficiency,[44] not unsurprising for a population from one Trust, discussing a specific topic.[41]

Details of ethical approval

The projects on which this manuscript is based were deemed service evaluations by Guy's and St. Thomas' NHS Foundation Trust, and approved in July 2020 for maternity services (reference 11046) and June 2021 for paediatric services (reference 12421). All respondents consented at the beginning of their interviews to be recorded and for their data to be used in subsequent academic work (e.g. reports; theses; publications; conference dissemination).

Patient and public involvement and engagement

The projects were discussed with members of the NIHR ARC South London Patient and Public Involvement and Engagement [PPIE] meeting for Maternity and Perinatal Mental Health Research (July 2020), which has a focus on co-morbidities, inequalities, and maternal ethnicity; an NIHR ARC South London Work in Progress Meeting (October 2020), focusing on maternity and perinatal mental health research; a Maternity Services Directorate Briefing at Guy's and St. Thomas' NHS Foundation Trust (January 2021), with a focus on health service improvements in safety and quality; an NIHR ARC South London Public Seminar (February 2021), which focused on COVID-19 rapid response research; at a meeting of The National Collaborative Group for COVID-19-related Maternal and Child Health Research (PIVOT-AL; November 2021), which is leading on the national response for policy makers during the pandemic; and to NHS England and Improvement's Chief Midwifery Office (December 2021), which focused on early insights from new research on maternity services to inform pandemic service recovery. We received feedback on recruitment, study design, and interpretation on findings from both lay and expert stakeholders, including members of the public, those with lived experience, health and social care professionals, researchers, and policy makers.

Role of the funding source

The funder had no role in the study design, recruitment, data collection, analysis, interpretation of the data, or in the writing of the report or the decision to submit the paper for publication. Whilst all authors had access to the dataset, a smaller group [SAS/KDB/OT/TD] were responsible for analysing the data, overseen by more senior researchers [LAM/JS/IW]. All authors were involved in the decision to submit the manuscript, with the first and senior authors [SAS/LAM] leading on submission.

Results

Analysis led to emergence of the theory: An 'Imperfect Mosaic', comprising four themes: 1:'A System Set in Plaster'; 2:'The Marginalised Majority'; 3:'Self-Discharging Responsibility for Change-Making'; and 4:'Slow Progress, Not No Progress'. Each theme is presented below with the most illustrative quotations. Of note, there was no difference observed in maternity and children's services or between interviews conducted earlier (2020), rather than later (2021), in the pandemic.

A system set in plaster

The NHS was viewed as rigid and stretched beyond capability to revolutionise, with little capacity to implement meaningful change at pace. The NHS was described as lacking ability to absorb structural change and was instead 'a system set in plaster'. This fragility meant new cracks continually emerged, which were only ever papered over, rather than properly repaired:

> "It's not just COVID, I think the Black Lives Matter situation is also heightened, people are burning out, burnt out, including the most senior members of our team, people are unhappy and have felt undervalued, I would say, particularly the Black and Ethnic Minority members of the team and I think COVID heightened that." Black Senior Clinician: Maternity Care

Data also demonstrated practices ingrained in the culture of the service, the wider NHS system, and society more generally, whereby inappropriate comments of a racial or ethnic nature were ignored or excused:

> "I don't necessarily know that it's just a hospital Trust issue. I think there is a wider issue in society. . . . . People keep giving me excuses for people's behaviour. . . . . but I don't know that the Trust could do much else at the moment bar getting more ethnic minorities into those higher positions. . . . . When you look around paediatric nursing, it's predominantly White, British people. That's quite interesting." White Frontline Clinician: Children's Health

The marginalised majority

During the pandemic, systemic issues were perceived to be compounded by confused messaging and a lack of co-ordinated response when services were reconfigured, widening inequalities extant between different professions:

> "...whilst we will be wearing, say, gloves and masks for things..... I don't think the cleaners were doing that and in fact sometimes I had to go and tell them, 'If they are telling you, you don't need it, you actually need it, so get one.' So, I think that communication was not filtered down to... those who might be at the lowest level. Also, I think the kitchen staff, again, may not necessarily be wearing masks, but now they are doing, and then I noticed that the reception area, they have now put glass in, so the receptionists are protected. But these are all areas where there will be a higher preponderance... so BAME staff or Black and Ethnic Minority people." Black Senior Clinician: Maternity Care

Racial inequity did not always present so obviously, but as micro-aggressions, which intersected not only with ethnic background, but other identities such as social class, privilege, Britishness, and for medical staff, training pedigree:

> "I called it out. I realised it's a micro-aggression. A midwife said to me, 'We treat you differently from [white colleague in same professional role]', and I thought, that's not on. I may be brown, I may look like an Indian, but actually that's not on, I'm not having that anymore..... I think for me, in the position that I am, it's very important that I call it out and support the people underneath me. And it's not just the colour. It's your inequality. If you've been to a comprehensive school or a private school, there is still a difference between doctors, not so much in midwives, but definitely in doctors, there are... you make your groups because you went to Eton together or you went to, you know. So, the people that actually are from the bus driver's daughter found it quite hard." Asian Senior Clinician: Maternity Care

Whilst skin colour and social class were more obvious points of schism between staff, foreign members of staff were, on occasion, identified as problematic to service delivery during the pandemic, due to their desire to return home to see relatives and loved ones. This was often less about 'White vs. Black' racism, but a more subtle in-group/out-group phenomenon:

> "And the fallout now is that I've noticed a lot of them are reducing their shifts..... They go down to 10 shifts a month. I've noticed a lot of sickness with anxiety and stress. We've got nurses from Portugal, Spain, the EU, that couldn't get home, you know, and they were here, and they were on their own and they were, you know, unable to see their families, and everything that was happening in Italy. You know, they were very scared. And we even had some that got stuck, you know, that were abroad and couldn't come back. We've had one recently that's gone home and has just come back to us and said, 'I can't face coming back', which has never happened before. She just doesn't want to come back to working here." White Frontline Clinician: Children's Health

It was reported that service provision was often prioritised at all costs, at the same time as foreign members of staff who were removed from their families and in some cases, had relatives who died abroad who they were not able to see again:

> "...it's such a diverse workforce, that there's also been staff feeling quite traumatised by bereavements. So, there's been a lot of family bereavements overseas, nobody's been able to go home for the funerals to see their family, there's been no grieving process for them. Again, we have conversations as senior managers and say: 'What are we doing for these staff members, what support have we got for them?' and I don't think we really have any..... how are people going to cope with the grieving process? Family that they'll never see again, they didn't get that opportunity to say goodbye to so I think we're going to go into a lot of stress, in a situation that's still stressful. This week alone there's four members of staff tested positive and off work, there's a huge amount of pressure on the team to keep a normal service running." Mixed Clinical Manager: Children's Health

Self-discharging responsibility for change-making

Some individuals within the system, through their actions or inaction, amplified the pre-existing structural inequalities within the Trust and wider NHS system:

> "I haven't seen anything really being put in place for our children to be honest. Not obviously. And I haven't had any families, different ethnic backgrounds, comment on that particularly. I think the thing that I've really noticed is in the midwifery side. There's a much higher mix of ethnic backgrounds in our midwifery team so I know there has been a huge amount of fear there and you could see it in the staff. They have been really anxious. They have been really pushed and I think they have definitely had a big impact on their staff. I know they were having to come to us to look to borrow PPE. I don't think they felt so supported by their managers." White Frontline Clinician: Children's Health

In the face of the pandemic, those who believed (incorrectly) they were not at risk, often held the belief that it was those at heightened risk who should take responsibility for their own health and risk assessments, rather than having an organisational response for all staff. This facilitated discharging management responsibility for the collective health of staff:

> "...it is not for me to judge or to say. It is up to people from Black and Ethnic Minority groups. I'm not

saying that to be politically correct, I'm saying that because I genuinely believe that. I think the organisation believes that they have tried, but we need to find out, in terms of protecting staff, why staff don't feel protected or why staff didn't feel protected, or why staff haven't done things." White Senior Clinician: Children's Health

Interestingly, those who were at risk sometimes self-discharged their right to accept additional provisions available to those who were more vulnerable to SARS-CoV-2 infection, such as those from Black, Asian, and Minority Ethnic backgrounds. Some did not want preferential treatment, or to seemingly abandon their team at a time when personnel were in short supply; thus, they enacted chronic presenteeism despite working conditions that posed a particularly serious threat to their personal health and wellbeing:

"My colleagues were risk-assessed very quickly, given PPE and offered time off, which a lot of them didn't want to take. . . . . The facilities were definitely there." White Frontline Clinician: Maternity Care

Slow progress, not no progress

Our data highlighted some positive changes, but the pace of change often lagged behind the impetus for that change:

"I was very aware that our tactical response leadership team was not very diverse. We know the impact of diversity on performance. I felt that we were missing a trick in that we were less multidimensional in our approach to certain problems. I am being very diplomatic there. I think it could have been handled a lot better. . . . . The time lag was about 3–4 weeks, then Black Lives Matter happened. Then suddenly we were more responsive, or we saw it more as a priority." Asian Strategic Leadership: Maternity Care

Staff often posited reasons why progress had been so slow, with lack of diversity and little-to-no understanding of intersectional issues often highlighted as hurdles for progressing more equitable policies. Respondents described a need for both individual change agents, and catalysts for change within the organisation:

"I think we need to have the awkward conversations and uncomfortable conversations. . . . . I've been doing active reading. . . . . I think it needs to be open conversations without letting your ego get in the way. . ." White Frontline Clinician: Maternity Care

Often, an admission of not knowing, or not having acted appropriately or quickly enough, was welcomed by staff and seen as a starting point from which to progress positively:

"I don't think anybody realised that at the time. But I think that in the following weeks, then yes, I think as soon as it was recognised, I think they were quite open and approaching people and saying 'Look, are we actually managing your risks appropriately?' But no-one was ever going to get this right from the beginning because we didn't know what we were dealing with." White Senior Clinician: Children's Health

Discussion

The theory: An 'Imperfect Mosaic' reflects four emergent themes derived from the experiences of those providing maternal and child healthcare services in South London, UK, during the SARS-CoV-2 pandemic. The healthcare system was seen to be brittle, lacking the resilience to augment and deliver change at the pace required. Modern-day micro-aggressions (i.e., slights of any form, regardless of intention, which communicate negative attitudes toward marginalised groups) occur between ethnic in-groups and out-groups, and responsibility is discharged to the individual when it comes to health and psychological wellbeing in the workplace. Positive change is desired, but slow and inadequate.

Racial and ethnic inequity have long been identified within the NHS, but the overt racism of the past[1-5] has been replaced by more subtle and nuanced practices, reflecting the complexities and pace of modern communication and public discourse.[26] Our data suggest the NHS is particularly maladapted to deal with such practices. It lacks plasticity, rendering it inflexible to change, and instead of facing racial and ethnic disparity head-on, it 'papers over the cracks'. This is perhaps unsurprising of a system which works at 'full-tilt', 100% of the time.

Despite best efforts, it is easy to be complicit, even just by being silent as the system continues to discriminate against those who work within it, and those who turn to it for care. Our work highlights the threat to racial and ethnic equity in healthcare remains an issue within the NHS, and specifically, our data illustrate racial or ethnic identity extends beyond skin colour, to include culture and background, class, education and professional identity, and (dis)ability. At the root of this in-group/out-group phenomenon was the lack of feeling 'British', an identity intertwined with the NHS.

We found the locus of responsibility for personal health, safety, and wellbeing was shifted to individuals working within the healthcare system. This allows those who deem themselves to be at 'low risk' to discharge responsibility for racial and ethnic inequity to those affected. Our work draws on what Arnold-Foster and colleagues[45] call 'obstacles to emotional health': medicalisation, individual responsibility, and medical exceptionalism. 'Medicalisation' considers those with problems to be blameworthy; similarly, we found that

identification of clinical vulnerability to SARS-CoV-2 was seen as a hindrance to service delivery and something which had to be addressed by the individual alone. Individual responsibility for one's own wellbeing is emphasised by interviewees who felt marginalised groups needed to speak out for themselves. Medical exceptionalism promotes healthcare as an extraordinarily self-sacrificing profession in which one must discount personal rights and responsibilities; in our data we saw chronic presenteeism by ethnic minority interviewees, despite risks to their own health.

Previous attempts have been made to tackle the complex issues of racial and ethnic inequity in healthcare, and there is not one change to practice which will eradicate the issue. We propose three practicable solutions to foster positive change.

First, we must engage in practices of cultural humility, which must *"not be limited to dimensions like racial or ethnic identity"*,[46] but extended to include culture and background, class, education and profession, and (dis)ability. Staff often have valid concerns, and they must feel able to express them through existing institutional feedback mechanisms that are meaningful, timely, and most importantly, fair. Such processes are necessary to prevent challenges to micro-aggressions 'on the shop floor'; no matter how valid those challenges are, they are unprofessional, can have a negative impact on staff morale, and importantly, distract from the core activity of patient care.

Second, we must re-cast the 'mosaic' through personal development or collective action, and acknowledgement by senior and influential NHS and Trust management that change is required. Recalibration of the NHS will take time and change requires strong leadership at all levels of management. There is an understanding that this is complex, and that pace may be slow, but progress must be made.

Third, we emphasise the need for healthcare services to assess representativeness at all levels of management and employ, to understand health care-providers' self-concept and identification with the organisation. In doing so, staff should be encouraged to understand their rights and responsibilities, whilst management must understand the differing needs of the staff who make up the tiles of the mosaic in their organisation. This is prioritising equity over simplistic equality.

Strengths of our study include its design, collecting experiential data from maternity and children's services, incorporating feedback from PPIE, and our analysis by data-driven grounded theory, rather than a deductive analysis which would rely on *a priori* assumptions of the population, phenomenon, and context. Our interviews spanned a calendar year, covering the first and second waves of the SARS-CoV-2 pandemic in the UK, including three national lockdowns and other almost continuous social restrictions. We enroled diverse participants, especially with regard to professional background and levels of seniority.

We are aware the generalisability of our findings may be questioned, as they are based on experiences in two specific service areas in one Trust. We also acknowledge that whilst our sample may be representative of the clinical staff within the Trust, it may not be fully representative (in terms of ethnicity and gender) of the whole body of staff when you take into account the non-clinical, service, and maintenance staff who work for and within the Trust. Whilst service-provider experiences can differ by service type within a single Trust, our findings are likely, at minimum, to be generalisable to other similar service areas in other Trusts. Respondents were asked to reflect on their experiences at micro-, meso-, and macro-levels, and this should provide confidence that our findings can be more widely applied within our healthcare organisations. We also acknowledge that inherent in any self-reported data is the potential for responses which may conform to those which are more socially desirable, however, our rigorous methods and our philosophical underpinning (as explained above) has enabled us to minimise the risk to credibility which a 'halo effect' may otherwise present. Future research should consider healthcare professionals' experiences outside of maternity care and children's health, whilst replicating our study and testing our theory outside of South London at hospitals around the UK, or indeed globally. A further limitation could be that the maternity care data were collected approximately nine months earlier than the children's healthcare data, although the analytic team had deemed data to be both comparable and compatible.

The racial and ethnic injustices we see in healthcare reflect those seen more generally in society and are not limited to traditional notions of prejudice (i.e., White vs. Black racism). There is appetite for change, but this will rely on an iterative process of personal and system-level reflection and action, and the ability to adapt to new challenges to racial and ethnic equity as they arise. This 'mosaic' may never be perfect, but must be ever-changing to achieve progress at a pace never less than slow.

Contributors

Conceptualization: [SAS, KDB, LAM]; Methodology: [SAS]; Software: [SAS; KDB, OT, TD]; Validation: [SAS, AE, KDB, OT, IW, JS, LAM]; Formal Analysis: [SAS, KDB, TD]; Investigation: [SAS, KDB, OT]; Resources: [SAS, KDB, OT, AE, NK, DR, IW, JS, LAM]; Data Curation: [SAS, KDB]; Writing – Original Draft: [SAS]; Writing – Review & Editing: [LAM, KDB, TD, OT, AE, NK, DR, IW, JS]; Visualization: [SAS, KDB, TD]; Supervision: [SAS, IW, JS, LAM]; Project Administration: [SAS]; Funding acquisition: [LAM, SAS, AE].

Data sharing interests

The data supporting the findings of this study are available upon reasonable request from the corresponding

author. The data are not publicly available due to privacy or ethical restrictions.

Declaration of interests

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Supplementary materials

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