

Perceptions of gender equity and markers of achievement in a National Institute for Health Research (NIHR) Biomedical Research Centre (BRC): A qualitative study

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Background and Context

- Biomedical Research Centres (BRCs), are partnerships between leading National Health Service (NHS) organisations and universities in England, conduct world-class translational research funded by the National Institute for Health Research (NIHR).
- In 2011, eligibility for BRC funding was restricted to universities demonstrating sustained Gender Equity success recognised by the Athena SWAN Charter for Women in Science Silver awards.
- Despite this structural change, Gender Equity research in BRC settings is underdeveloped, yet critical to the acceleration of women's advancement and leadership.

Background and Context

- Study setting: NIHR Oxford BRC - a leading translational research organisation based at the Oxford University Hospitals NHS Foundation Trust and run in partnership with the University of Oxford. It is one of 20 NIHR BRCs in England and in 2016 was awarded £113.7m for the period from 2017 to 2022 to support translational research.
- The NIHR Oxford BRC is divided into 20 research themes comprising four clusters: Precision Medicine, Technology and Big Data, Immunity and Infection, and Chronic Diseases.
- <https://oxfordbrc.nihr.ac.uk>
- Twitter @OxfordBRC

Study Objectives

- This study set out to explore both women's and men's perceptions of the importance of monitoring and measuring GE and current markers of achievement in an NIHR BRC.
- The aim was to create context specific evidence for NIHR BRCs to facilitate women's advancement and leadership progression in translational research.

Key Findings

Results are based on two discrete projects:

A Gender equity survey - 53 (22%) of 243 survey respondents, provided free text comments (34 women, 16 men, 2 preferred not to say, 1 self-described),

16 Semi structured interviews with women affiliated to the BRC

Key Findings

Table 1 Demographic characteristics of participants from GE Survey

Characteristics	N= 53
Sex	n (%)
Female	34 (64%)
Male	16 (30%)
Prefer to self describe	1 (2%)
Prefer not to say	2 (4%)
Age	
18-30 years	3 (6%)
31-40 years	13 (25%)
41-50 years	19 (36%)
51-60 years	13 (25%)
61 + years	3 (6%)
Prefer not to say	2 (4%)
BRC Affiliate Category	
Investigator e.g. Principle Investigator/Co-Investigator/ Chief Investigator	20 (38%)
Research Associate (e.g. Researcher and Research Fellow)	12 (23%)
Admin/Technical/Professional manager/Support	15 (28%)
Other	4 (4%)
Prefer not to say	2 (4%)
Duration of Affiliation to the BRC	
Up to 2 years	15
3-7 years	21
More than 7 years	14
Prefer not to say	2
Missing information	1

Key Findings

Table 2 Demographic characteristics of participants from GE Qualitative Interviews

Characteristics	GE Qualitative Interviews (N=16) n (%)
Sex	
Female	16 (100)
BRC Affiliate Category	
Early career researchers	3 (18.8)
Senior postdoctoral researchers	4 (25)
Associate Professors	4 (25)
Professors	1 (6.3)
Senior Managers	3 (18.8)
Manager	1 (6.3)

Key Findings

Table 3 Description of the coding tree

Main Themes	Sub themes
1. Views on the Athena SWAN Charter for Women in Science	<ul style="list-style-type: none"> • Catalyst for change • Limitations of Athena SWAN • Additional organisational support for those with childcare responsibilities required
2. Views on monitoring GE in Biomedical Research Centres	<ul style="list-style-type: none"> • Important to monitor GE in BRC settings • Complexity of monitoring GE • Broader equality, diversity and inclusion
3. Views on current markers of achievement and GE	<ul style="list-style-type: none"> • Context is important • Perceptions of structural barriers to GE • Concerns about positive discrimination
4. Recommendations for actions to improve GE in BRC settings	<ul style="list-style-type: none"> • Monitor BRC GE metrics at an organisational level • Monitor BRC recruitment and retention by gender • Monitor academic citizenship activities by gender • Create BRC GE organisational processes to catalyse sustainable change in GE

Views on Athena SWAN Charter

Catalyst for change

Several interviewees described how the Athena Swan GE Charter for Women in Science link to NIHR BRC funding eligibility had catalysed positive change in GE. For example, increasing the diversity of committee membership, and changing the timing of department meetings to take participants' caring responsibilities into account. One senior academic described the benefits of changing meeting times as a consequence of Athena SWAN:

“I do know about Athena SWAN...People do moan about it but I think it genuinely has made a difference...Very, very simple things actually make a big difference, like moving meetings to times...in the middle of the day so you can go and don't have all the discussions that are interesting in the pub afterwards because I can't do that...” (Q1, 11, F, Associate Professor)

Views on Athena SWAN Charter

Limitations of Athena SWAN

Conversely, several interviewees described the Athena SWAN Charter as a “box ticking exercise” implemented primarily because of the link to NIHR BRC research funding and questioned whether it had led to sustainable change in women’s research careers. Athena SWAN committees were described as overtly time consuming and bureaucratic with discussions predominantly focussed on women’s childcare responsibilities not career progression. Strong commitment by senior leadership was required to catalyse sustainable change in GE as this senior researcher explained:

“Athena SWAN exists is so that we’re eligible for things like NIHR funding. If you really were interested in equality, then you would go to the very top of people in divisions and make them deal with gender bias, not coming and putting more workload on people like me who are already affected by it and have precious enough little time to do things like write grants as it is”.

(QI,14, F Associate Professor).

Views on monitoring Gender Equity in BRCs

Important to monitor GE in BRC Settings

Survey and interview participants commented it was highly important to monitor and benchmark GE in BRCs. This was felt to be particularly important in clinical academic medicine where representation of women is traditionally low as this senior female investigator described:

“The gender imbalance is particularly noticeable in clinical rather than non-clinical staff and this must be monitored. At present there is very little information on this and therefore ways to address the issues.”

(GES R243, F, Principal Investigator)

Views on monitoring Gender Equity in BRCs

Complexity of monitoring GE

Whilst participants highlighted monitoring gender equity was extremely important through benchmarking of data. Others highlighted the complexity of gathering such data. This industry manager highlighted gender and industry metrics are not routinely monitored and assigning gender to data would be challenging:

“I have never recorded gender against anything, apart from putting someone’s name... Nowadays you wouldn’t want to assume somebody’s gender either so you couldn’t judge it wholly on someone’s name... It’s not something we record so it would be very difficult to report on it I think.”
(Q1 2, F, Manager).

Views on monitoring Gender Equity in BRCs

Broader equality, diversity and inclusion

Both male and female interviewees and survey respondents felt it was important to monitor not only GE (which is the remit of the Athena SWAN Charter), but also characteristics of diversity:

“Other aspects of diversity are as important as gender and also need to be monitored. Specifically disability, original social class, (and) ethnicity. The clinical research community (in and out of Oxford) is remarkably non diverse when this broader aspect beyond Athena SWAN is considered and is not representative of the NHS workforce diversity.”

(GES R96 M, Other)

Views on current markers of achievement and Gender Equity

Context is important

Many survey and interview participants described the limitations of current markers of achievement because they lacked important contextual adjustments e.g. career breaks for maternity care, part time working, and caring responsibilities. As this female senior manager highlighted, absolute numbers for certain markers of achievement such as peer reviewed publications were not necessarily equitable to women who had taken maternity leave:

“Context is important... obviously the number of publications – that’s relatively easy...that can be a little bit nuanced as well because that may be in the context of having maternity leave one year. So parental leave is quite important - this applies to men too. I don’t think this is necessarily completely focussed on women because you need that comparator group...Maternity leave, output, grant applications, whether they are full time or part time, and also I think qualitative data here is quite important too because I don’t think that statistics on their own can tell the whole story.” (Q1 4, F, Senior Manager).

Views on current markers of achievement and Gender Equity

Perceptions of structural barriers to GE

Others felt disadvantaged when applying for research grants and promotion which did not take into account maternity leave when assessing their academic track record:

“ I feel I was always a bit more delayed in the career progression than male counterparts. Many times grant bodies didn't take that into account...if you have had maternity leave...The guidelines to be a university research lecturer... are the same for male and female but you cannot really measure the experience of a female researcher the same way as you measure a male researcher. It is quite different. You only have to look around, many of the PIs (Principal Investigators) are males and the postdocs are females. Why is that?”

(QI6, F, Investigator)

Views on current markers of achievement and Gender Equity

Concerns about positive discrimination

Conversely, several survey respondents and interviewees raised concerns about positive discrimination stating they did not wish to be promoted simply because of their gender but rather due to their contribution to science as this senior researcher described:

“I didn’t want to get anything because I was female. I wanted to get it because I deserved it...The whole point is this person can do the job whoever they are and they might do the job differently because they are female...it’s about being capable within that role.”

(Q1 7, F, Associate Professor)

Recommendations for actions to improve Gender equity in BRC Settings

Monitor BRC recruitment and retention by gender

Participants felt it was also important to monitor recruitment and retention for GE and proposed a range of actions. These included monitoring the seniority of staff and gender and their job roles to assist exploring retention and recruitment processes, gender balance of interview panels and benchmarking number of applicants for posts by gender:

“Compare number of senior investigators and Professors with the numbers and sex of postdocs and doctoral students, where are people dropping out? or where are the recruitment practices potentially biased?”

(GES R227, M, Research Associate)

Recommendations for actions to improve Gender equity in BRC Settings

Create BRC GE organisational policies to catalyse change

Male and female survey respondents and interviewees raised the importance of specific organisational policies at an institutional level to support career progression irrespective of gender. Some respondents stated that gender diversity in senior leadership roles would demonstrably improve GE. Inequity in pay was also raised by participants as an important marker of GE. Organisational processes and policies should be implemented to support GE as this female researcher describes:

“You should create processes that remove bias and honour achievement, irrespective of gender or other identifiers”.

(GES R225, F, Research Associate)

Conclusions

This is one of the first studies to explore both women's and men's views on markers of achievement for women in academic science specifically in a BRC.

Previous research in this field has focussed predominantly on Athena SWAN initiatives in universities whereas this paper has a broader remit.

Markers of achievement for monitoring GE in BRCs should take into account contextual factors specific to BRCs and women's career progression and professional advancement.

Gender Equity markers of achievement should be complimented with broader aspects of equality, diversity and inclusion.