# **Research Fatigue in Small Island Countries**

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The islands of the Caribbean Sea compose 13 sovereign nations and an additional 14 countries or territories with ties to colonial powers. The countries' populations range from just over 1000 to more than 11 million. Most of these countries, despite having relatively small population sizes, have multiple tertiary education institutions with graduate degree programs which have research requirements for both students and faculty. For example, the island nation of Grenada, my home country, has one university and the population is approximately 113,000, while the neighboring island of St. Vincent has a population of around 104,000 and five universities. It should be noted that the pace and development of scientific research, and as a result research ethics, in the Caribbean has lagged that of developed countries. However, the importance of conducting research based in a commitment to improving the health and well-being of Caribbean people has been brought to the forefront by the various stakeholders in the region, such as tertiary education centers and local governmental bodies.

As an IRB administrator and research officer, part of my role is to be aware of issues affecting research conduct and participants' well-being. My aim in this paper is to explore research fatigue, as it is called in research ethics literature, and suggest ways to prevent it from impeding research in small island countries. While most of the available literature on research fatigue focuses on over-research of small groups and/or communities, there is also a cause for concern when conducting research with developing countries with smaller overall populations. This justifies taking steps to prevent research fatigue before it sets in.

#### What is Research Fatigue?

According to a study conducted by Ashley, in general research fatigue refers to participants' unwillingness to participate due to a psychological and emotional exhaustion with the research process.<sup>1</sup> This tends to be common for groups of persons who are tired of sharing information about themselves and not seeing any tangible benefits from their participation in research. In this regard, research fatigue can begin to be viewed as respondent fatigue due to overexposure of research engagement, leading to a deteriorating quality of the data that is shared. Goodman et al. explored the experiences of over-researched indigenous people in Canada and found that they felt displeased with the lack of transparency in research, with most studies not addressing community concerns or being seen as beneficial to them.<sup>2</sup> This tended to result in participants not caring and simply telling researchers what they thought they wanted to hear, which can skew the results and outcomes of a study.

Research fatigue stems from both research studies requiring participation over an extended period, or from over-researched populations.<sup>3</sup> Though often overlooked, the issue of over-researching communities is becoming more of a relevant topic as with researchers like Sukarieh and Tannock who have noted this is a serious research concern among social scientists.<sup>4</sup> They state that how willing someone is to participate in research can be attributed to:

- The alignment of the research to their interests
- A lack of perceived beneficial impacts of the research based on past experiences
- Wariness of researchers due to perceived expectations of exploitation

### **Contributors to Research Fatigue**

According to Patel et al., the factors which can exacerbate research fatigue include having a limited participant pool, perceived need for quick conduct of research, making participants feel undervalued, seeing no application of research results, overwhelmed stakeholders, no monitoring of requests to participate in research and a general lack of communication between researchers and participants.<sup>5</sup> These points are echoed by Ashley, where they note the following determinants that contribute to research fatigue:<sup>6</sup>

 Research Concentration: the more time and effort invested by a participant in the research process, the more likely for them to experience research fatigue. This research concentration occurs in greater frequency when the population of interest is small.

- Research Burden: How burdensome the research, i.e., how emotionally or psychologically taxing the research experience may be.
- Perceived Utility: View of research usefulness or benefits by the participants.
- Intrinsic Traits: Psychosocial characteristics of the participant that may increase their vulnerability
- Demographics: Having a smaller population size leading to more frequent recruitment to research studies by the same people
- Prior Experience: Negative experiences with less experienced researchers
- Inexperienced Researchers: Student or junior researchers, whom may be conducting research for the first time, may not target community needs, continuously target convenient groups or communities, may not complete their stated study goals and may not share the results with the community, leading to an increased sense of exploitation by the community.<sup>7</sup> Student research is a requirement at most tertiary educational institutions and it usually is based on the interests of the students or courses and not developed to address the concerns of the local community.

Taking an ethical view of over researching and research fatigue, we can apply the principles of the Belmont report in the following ways:

- Respect for persons: The autonomy of participants should be respected by making them aware of the possibility of research fatigue during the informed consenting process, and by making sure that research participation aligns with participants' expectations.
- Beneficence: Research fatigue may create a negative mental state amongst participants, inclusive of feelings of frustration and apathy.
- Justice: with an increasing research burden on particular participants and/or communities, there should be proportional increases of benefits to these participants and/or communities.

According to information shared from Montana State University, the impacts of research fatigue can entail difficulty recruiting members of the target population for current or future research studies and cause inaccurate response data due to dishonest feedback. In an article in *Nature*, it was noted that researchers may opt to undertake research in one community over another due to pre-established research structures or because of their favorable proximity to the researcher's university, contributing to over-research.<sup>8</sup> One may wonder why it would be a concern if persons are voluntarily participating in research studies as it respects their autonomy. However, it was shown that this over-researching can cause a community to bear greater burdens associated with participating in research without appropriate benefits or rewards, which eventually could lead to displeasure and possible diminished desire to participate in research.

Koen et al. alluded to over-researched communities being an ever-developing ethical concern, especially with research in developing countries.<sup>9</sup> At the same time, the issue was seldom discussed in major ethical guidelines. Interestingly, their study noted that the feeling of being over-researched stemmed from a strained relationship between researchers and community more than a mere issue of too many research studies. With the negative connotations in mind, participants in Koen et al's study also worried that the label of being an over-researched group can potentially deprive them of access to future beneficial research, if roadblocks to the frequency of research were put in place. Overall, their study found that over-research was interpreted as an unequal benefit to researchers versus communities.

Studies of research fatigue tend to focus on small, specific populations. I postulate that the negative impacts of research fatigue on an entire country is of greater concern. Residents may spread the views of discontent for research with future generations and potentially make the country un-researchable due to a wholesale rejection of research participation.

## Assessing & Addressing Research Fatigue in the Caribbean

Research fatigue presents enough of a risk to research in small island countries in the Caribbean that people who care about research promotion and scientific integrity in the region should take steps to assess and address it.

As of writing, there are no systematic studies of research fatigue in the Caribbean or data that show it is a problem. Anecdotal evidence from my own experience suggests that it might be an issue. As such, it will be important to measure research fatigue in countries with small populations with active research and training institutions such as countries of the Caribbean. Even without evidence, it is important to develop mitigation strategies to prevent a climate of research fatigue in the Caribbean, to understand its risks and avoid them.

Researchers and research ethics oversight committees both have an obligation to ensure that the welfare of research participants from the population is an utmost priority, and that research fatigue does not negatively impact their well-being—either directly or indirectly. Furthermore, research fatigue may be more at issue in places where students conduct research as part of their education. Students are not taught or do not understand that their research may contribute to research fatigue within the community or population they are studying. They, their research supervisors, IRB members who review their protocols, and other stakeholders all have roles in ensuring that research is conducted responsibly, and the integrity of the research enterprise continues in a form that still provides benefits to society and generalizable knowledge, while at the same time mitigating fatigue and apathy towards science and research.

## Suggested approaches to mitigate research fatigue

One might be concerned that assessing and addressing research fatigue may curtail researchers' academic freedom, as one way of reducing research fatigue is to reduce the number of research studies. However, the main ways of preventing research fatigue align with best practices in scientific conduct and community-based research. Being mindful of this, I suggest approaches to preventing and/or mitigating research fatigue that focus on increased community engagement in research, community feedback, and providing benefits that directly respond to their needs. Research methods courses and supervisors of student researchers should educate students to conduct community and stakeholder engagement as they identify a research question and design their methods for answering it. The conduct of research for educational purposes may need to be curtailed in certain cases, but that does not negatively impact academic freedom, and the skills to be gained in students' research can be gained instead through other educational activities. Rather than design and conduct research, for example, students might learn to identify research priorities within a community and work with the community to design their study. Emanuel et al. developed an eight-part ethical framework that, if followed, would minimize possible exploitation of research participants in developing countries.<sup>10</sup> This framework suggests that researchers should consider collaborative partnership with host institutions, social value and scientific validity of their research, fair selection of participants, favorable risk-benefit ratio, independent review, thorough informed consent and finally respect for participants and study communities.

If necessary to reduce the quantity of research being conducted in small communities to combat research fatigue, Phipps suggested that a research ethics committee (REC) can reflect on a few key areas of proposed research before deciding on approval.<sup>11</sup> The ethics committee should assess if the research arose out of a need put forward by the community and other stakeholders, review the motivations for desiring to conduct the research, the possibility of answering the research question through existing data sources, and whether the participants will be looked after both during and after the research is concluded.

An important caveat as it relates to research ethics committees in the Caribbean, one must note their governing bodies, i.e., some committees are housed at universities or in applicable government ministries, such as the ministries of health. For example, the only research ethics committee in Grenada is housed in its sole university, but St. Vincent's research ethics committee is part of the Ministry of Health. The structure of research ethics committees may affect researchers' perceptions of their motivations and authority to shape research in this way.

Patel et al. provides guidance on ways researchers can address and limit the possibility of research fatigue in their studies through:<sup>12</sup>

Transparency of research aims and motivations shared during all interactions between the researchers and participants to help ease their concerns by sharing your past experience and raising awareness that ethical guidelines are being followed.

- Be sensitive of negative past interactions as past participants in research.
- Keeping participants informed of study results through avenues such as sharing research reports, accessible project overview websites and community meetings to disseminate findings.
- Avoiding conduct of rushed research studies due to deadlines as in the case of student research.
- Avoiding duplication of similar research projects by communicating with all stakeholders such as other researchers, research organizations or communities.
- Forging deep links with the community.
- Provision of tangible benefits to the community, not just to the researchers, which address issues the community deems important.
- An overall enhancement of societal awareness of research.

It has been suggested that another mitigator of over-research and research fatigue would be the oversight of research ethics committees. However, ethics committees cannot tell researchers what research to conduct but can be sensitive to and consider the potential for research fatigue in each study.<sup>13</sup> It is understandable that at the same time this may be difficult due to the lack of a clear definition of over-researched communities and way of quantifying it so RECs can make determinations on frequency of research allowed. RECs might also choose to ensure that informed consent processes inform potential participants of the possibility of and harms of research fatigue. In addition to this, RECs should ensure that researchers make research study results accessible and substantial to participants in an effort to lessen the possibility of apathy towards research moving forward. This requirement for ethical research is not always met by student researchers or others and, when results or related information are shared with participants and their communities, may not be shared in ways that are accessible or easily understandable.

# **Conclusions and Lingering Issues**

I propose a move to more frequent instances of community based participatory research and development of research of higher social value. At the policy level, I am inclined to suggest that Universities and other research institutes impose stricter criteria for the allowance of only high quality research that directly address the needs of communities, especially those which are frequently included in research due to proximity and convenience. University research policy might stipulate that faculty be educated to teach students the criteria mentioned above, and that IRBs emphasize these criteria in their reviews.<sup>14</sup>

In conclusion, over-researching populations has been shown to lead to research fatigue, which can be a serious ethical consideration with both present and future impacts to the research environment. Though over researching is generally considered with smaller marginalized groups of interest in larger countries, it can be applicable to entire countries if they possess a small population and have active research climates. With lower populated countries, such as countries of the Caribbean region, greater awareness is needed about over research and research fatigue. All stakeholders should be better informed through educational campaigns, reporting and addressing negative research experiences, and underscoring the importance of socially valuable research. It is my hope that this article will serve as a catalyst for such efforts and for research taking a deeper look into the quantity and quality of research taking place in the Caribbean to determine its possible research fatigue implications.

#### **Works Cited**

<sup>1</sup> F. Ashley. "Accounting for Research Fatigue in Research Ethics," *Bioethics* 35, no. 3 (2021): 270–76.

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<sup>5</sup> S.S. Patel, et al., "Research Fatigue in COVID-19 Pandemic and Post-Disaster Research: Causes, Consequences and Recommendations," *Disaster Prevention and Management* 29, no. 4 (2020): 445–55.

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<sup>9</sup> J. Koen, et al., "The 'over-Researched Community': An Ethics Analysis of Stakeholder Views at Two South African HIV Prevention Research Sites," *Social Science & Medicine* 194 (2017): 1–9.

<sup>10</sup> E.J. Emanuel et al., "What Makes Clinical Research in Developing Countries Ethical? The Benchmarks of Ethical Research," *The Journal of Infectious Diseases* 189, no. 5 (2004): 930–37.

<sup>11</sup> A. Phipps. "Research with Marginalised Groups: Some Difficult Questions," Ali Phipps (blog), September 2015. https://phipps.space/2015/09/29/researching-marginal-ised-groups/.

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<sup>13</sup> F. Ashley. "Accounting for Research Fatigue in Research Ethics," *Bioethics* 35, no. 3 (2021): 270–76.

<sup>14</sup> E.J. Emanuel et al., "What Makes Clinical Research in Developing Countries Ethical? The Benchmarks of Ethical Research," *The Journal of Infectious Diseases* 189, no. 5 (2004): 930–37.

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