



Staff and participant perceptions of optimal recruitment and retention strategies for biomedical cohort studies in the Caribbean

A. Bailey¹ · I. Govia² · J. McKenzie² · S. Richards² · S. Coleman² · M. K. Tulloch-Reid² · C. Ragin³ · K. Ashing⁴

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Abstract

Purpose To identify staff and participants perspectives of best practices that facilitate achieving enrollment and retention targets in biomedical cohort studies in Caribbean populations.

Methods Eight focus group discussions (FGDs) were held with research stakeholders including research (i) nurses/study supervisors, (ii) field staff/data collectors, and (iii) rural and urban participants of the Third Jamaica Health and Lifestyle Survey (a national NCD risk factor survey with biospecimen collection) to capture qualitative data on experiences with recruitment, training, retention challenges and potential solutions or strategies for strengthening future efforts.

Results Our findings indicate that trained, experienced study staff with good interpersonal communication skills enhanced the proficiency of field operations and attracted study participants. Targeted community and stakeholder engagement alongside strong support from the coordinating center increased the reach and efficiency of the data collectors. Timely participant feedback, gender-appropriate approaches, and socioeconomic balance enhanced equitable enrollment and retention of participants of cohort studies particularly the hard to reach groups.

Conclusion Well-functioning research teams using traditional and social media promotion, applying gender-appropriate and personalized approaches together with strategies for reaching the less accessible socioeconomic groups, are effective for recruiting and retaining members of a Caribbean cohort. These strategies may also enhance the recruitment of other Black populations in the Diaspora including the US and Caribbean into biomedical studies including cancer research.

Keywords Recruitment · Retention · Qualitative Research · Cohort Studies · Caribbean

✉ A. Bailey
althea.bailey02@uwimona.edu.jm

I. Govia
ishtargovia@gmail.com

J. McKenzie
joette.mckenzie@uwimona.edu.jm

S. Richards
saderichads@live.com

S. Coleman
sheldoncoleman01@gmail.com

M. K. Tulloch-Reid
marshall.tullochreid@uwimona.edu.jm

C. Ragin
Camille.Ragin@fccc.edu

K. Ashing
KAshing@coh.org

- ¹ Department of Community Health & Psychiatry, Faculty of Medical Sciences, The University of the West Indies, Mona Campus, Kingston 7, W.I, Jamaica
- ² Epidemiology Research Unit, Caribbean Institute for Health Research, The University of the West Indies, Mona Campus, Kingston, Jamaica
- ³ Cancer Prevention and Control Program, Fox Chase Cancer Center, Philadelphia, PA, USA
- ⁴ Division of Health Equities, City of Hope Medical Center, Center of Community Alliance for Research & Education, Duarte, CA, USA

Background

Cancer and cardiovascular disease (CVD), the biggest contributors to Black morbidity and premature mortality worldwide [1], produce significant health disparities and kill more Black individuals in the US [2, 3] and the Caribbean [4] than any other ethnic/racial group. The etiology and outcomes of these diseases are influenced by genetic, environmental, and lifestyle factors; therefore, studying genetically similar Black populations in various geographic locations can help us understand the role of biology and place on disease risk and outcomes.

Cohort studies are central to biomedical population research and are especially required for examining etiology and outcomes for multi-factorial chronic illnesses like cancer and cardiovascular diseases. Cohort studies can help us dissect etiology in more detail to illuminate personalized and community vulnerabilities associated with risks due to genes, environment, behavior, and other factors. Given the high cancer and CVD burden, studies of Blacks in various geographic regions can provide us with new data, insight, and knowledge to address health disparities. However, recruitment and retention persist as major barriers to research with Blacks both in the US and the Caribbean.

We have recently been funded by the National Institutes of Health to establish a longitudinal cohort study in Jamaica, which will serve as a resource for US–Caribbean comparative research. The Living In Full Health (LIFE) project was designed to collect health and lifestyle data and biological specimens, and to longitudinally follow a Jamaican cohort for the incidence of cancer and CVD. One of the primary goals of this study is to first identify the best strategies that optimize enrollment and retention of Caribbean nationals in cohort studies.

National health and lifestyle cross-sectional surveys have been conducted in Jamaica since 2000 to provide up to date estimates of the country's health and disease status including the prevalence of CVD and risk factors for CVD. The third cross-sectional survey the Jamaica Health and Lifestyle Survey (JHLS III) was conducted in 2016–17. Leveraging this existing resource the LIFE project team engaged participants, supervisors, interviewers, and team leaders from the JHLS III and local cohort studies to collect qualitative data to gain their perspectives on recruitment, training, logistical issues in the field, retention challenges encountered, and potential solutions or strategies to overcome the challenges. To obtain recommendations for improved data collection processes and better retention of participants in the LIFE project, JHLS III participants were also interviewed to provide feedback on their experiences in the JHLS III study, and to assess their knowledge of and attitudes toward behavioral studies, clinical trials,

biomedical studies, and bio-banking. In this paper, we present the findings from this investigation.

Methods and procedures

Design

A qualitative study was conducted using eight focus group discussions (FGDs) which were held between 12 December 2018 and 12 March 2019. The use of FGDs is a qualitative approach to get an in-depth understanding of a phenomenon from a purposefully selected group of persons, rather than from a statistically representative sample. FGDs can generate discussion about research topics that require collective views and a clear understanding of the perspectives behind those views [5].

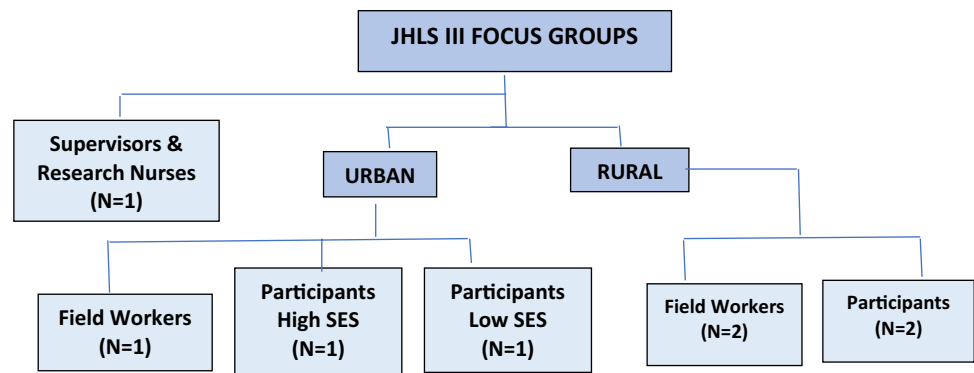
Participant recruitment

To gather informative data in our FGD, we focused on purposefully recruiting participants based on their experiences and willingness to participate and provide feedback. The FGDs participants included: research nurses (from national surveys and cohort studies conducted at The University of the West Indies); the JHLS III field staff/data collectors and supervisors; and rural and urban participants from the JHLS III study in three separate geographic regions, including those in high and low socioeconomic status (SES) communities. Figure 1 describes the number of FGDs that were conducted and their composition.

Participants who expressed an interest were assured of confidentiality and offered an incentive of JMD 3,000 (USD 25) to participate.

Data collection

Each FGD was held in a private space, free from interruption, at a convenient site close to the areas of residence or work of participants. The sizes of the focus groups ranged from five to 15 participants. The FGDs were carried out using experienced facilitators, two note takers, and one person providing administrative support. The FGDs lasted between 90 and 150 min; the discussion with research nurses was the longest in duration. Discussions were recorded with permission using a digital voice recorder. The focus group guide consisted of a list of topics for discussion related to various types of research including behavioral studies, clinical trials, biomedical studies, and bio-banking. A list of definitions of the terms used were provided and read by the facilitator who also provided clarification where necessary. Signed consent was obtained and demographic data also collected. Debriefing sessions were held with the data

Fig. 1 FGDs by participant type and location

collection staff at the end of each FGD to discuss the process, their initial sense of key ideas and themes from the discussion, and areas for improvement/awareness for the next session.

Data analysis

Each FGD was transcribed verbatim by an experienced transcriptionist and checked by the moderator and note takers for accuracy. Data collectors and co-investigators read all transcripts several times. Peer questioning and cross-examination among data collectors and co-investigators were used to ensure the trustworthiness, dependability, and credibility of the data. Peer checking of the transcripts was carried out by a co-principal investigator who was not involved in the data collection. Data from the transcripts of all eight FGDs were analyzed using the “content and thematic analysis” approach [6, 7]. In this method of qualitative analysis, key phrases were used to identify similarities in responses to the individual issues related to enrollment and retention of participants in studies particularly cohort studies. Themes emerging from the data in transcripts from the FGDs were compared and contrasted between data collectors, note takers, and the co-investigator who was not involved in data collection. Quotes were identified from each FGD to illustrate group consensus. Recurrent themes were noted and validated by a second round of scrutiny of the data by all co-investigators to ensure accuracy regarding the magnitude of agreement or disagreement.

Findings

Focus group participants

Study participants consisted of study workers including research nurses, interviewers/phlebotomists, and participants of the JHLS III study (2016–17) from rural, urban, high, and low socioeconomic areas. Study workers ranged in ages from 30 to 68 years; there were 33 females and three

males and the majority, (21) had obtained tertiary education. The JHLS III staff who volunteered to participate in the FGDs was predominantly female and reflected the ages of the survey team in which the initial candidate pool was predominantly female. Participants of the JHLS III who took part in the four participant FGDs ranged in ages from 19 to 79 years; there were 35 females and four males, reflecting the disproportionate number of women who agreed to participate compared to the men who were approached to participate but who declined. The FGD with high SES participants had 11 of the 12 members with tertiary education and one with vocational level. The remaining 25 JHLS participants comprised six with tertiary education, six with vocational training, 18 attained high school education, and six primary education only. Table 1 provides a demographic profile of the participants ($N=84$) in the eight focus groups conducted.

Recruitment and retention challenges and solutions

Three themes emerged from the discussions with nurses and supervisors and interviewers: 1) Staff–participant relationship; 2) Staff characteristics and ongoing support needs; 3) Study logistics and fieldwork support. These three themes encapsulate the recruitment and retention challenges identified by the participants.

Research staff challenges and solutions

Staff–participant relationship

The rapport between research staff and participants emerged as an important element for recruitment and retention. The focus group discussants noted that the relationship between study staff and participants must be constructed on trust and assurance of confidentiality. They recommended that attention be placed on communication that builds strong relationships and facilitate participants’ engagement and retention for the duration of the study. It was noted that the communication between field staff and participants should be participant centered, informative and non-intimidating. Field

Table 1 FGDs Demographic Profile of Participants

FGD type	M	F	Age range	Highest level education				Total
				T	V	H	P	
Urban Interviewers	0	7	30–68	3	2	2	0	7
Urban Supervisors & Research Nurses	0	12	45–61	9	1	2	0	12
Urban Participants (Low & Mid. SES)	2	12	34–84	1	2	7	4	14
Urban Participants (High SES)	1	11	40–79	11	1	0	0	12
Rural Participants (1)	1	14	19–77	4	3	6	2	15
Rural Participants (2)	0	7	37–62	1	1	5	0	7
Rural Interviewers (1)	3	9	35–58	6	2	4	0	12
Rural Interviewers (2)	0	5	35–51	3	1	1	0	5
Total	7	77		38	13	27	6	84

T tertiary, V vocational, H high/secondary, P primary

N = 84

staff, therefore, should always be cognizant of non-verbal cues and messages they transmit throughout the data collection process and be prepared to provide the health resources that participants request. A participant from the FGD with research nurses explained:

So you want to ensure that whoever is going to administer the survey is knowledgeable enough to explain the study in layman's terms and explain what is required from them and how they will benefit health wise.

Field staff should also exhibit high self-confidence when conducting interviews and should be familiar with all questions to be capable of making interviews conversational. Ability to build rapport with participants and respond to their non-verbal cues was clearly as important as the field staff's familiarity with the data collection tool for enhancing the willingness of respondents to participate in further research.

Staff characteristics and ongoing support needs

Sub-theme: staff characteristics The characteristics of field staff were also identified as important to recruitment and retention. Discussants pointed out that since the study is longitudinal with multiple data collection points, staff inevitably become involved in participants' lives. Therefore, it is important for field staff to be carefully selected, well trained, sincere, invested in the work, and capable of building rapport with participants. A participant from the FGD with research nurses commented *"people doing data collecting have to be people friendly and love what they do. Not just about collecting money."* Discussants also noted that such sensitivity extends to the need to use gender-sensitive strategies to ensure compliance among participants.

Being knowledgeable about the study and capable of cogently explaining the research purpose to participants

was also perceived to be critical to participant recruitment and retention. For example, one research nurse shared: *"You have to tell them what you will be doing, explain everything that is in the consent form and examples of what is in the questionnaire; when you do that they will say, yes we will do it."* Discussants suggested expanding the content of staff training to address the study protocol in detail; they indicated that typically more time needed to be spent to practice the procedures they were expected to conduct. As one interviewer noted: *"We needed more time to practice. Not so much for the questionnaire but to do the tests."*

Sub-theme: field staff's ongoing support needs Discussants also believed there was a need for adequate supervision and support of field staff. They perceived the training provided to field staff was too short and indicated that this resulted in interviewers being inadequately prepared to be effective in the field. The roles and responsibilities of field staff and supervisors were also not clearly delineated. Field staff did not believe they were adequately supported by their supervisors to carry out their tasks. One interviewer noted: *"Yes some were assigned as supervisor, but they were not effective... they were not present, they were not offering any assistance."* While there were some data collection staff who had a more positive experience, this sentiment was echoed in each FGD with interviewers.

Discussants noted a lack of systematic and effective communication between field staff and supervisors. It was recommended that the roles and responsibilities of study staff be clearly defined and consistently applied. Regarding staff training, modifications were recommended to enhance staff buy-in/ownership and confidence such as ongoing training and supervision, staff incentives, recognition, and awards. Training for supervisors should include the required competencies such as study details and effective communication.

In addition to this supervisory type of support, field staff also described support needs in terms of the study setup. They spoke about late remuneration, lack of transportation to carry study equipment during data collection, and periodical faulty equipment. With respect to the faulty equipment, one participant from a FGD with study staff recommended: “*So in the future ... focus on the equipment that we are going to be using and skills in collecting the samples because most of us have experience doing surveys.*” In terms of remuneration, data collectors (research supervisors and nurses) shared that they were concerned about the lack of timeliness of their own payments and they requested promptness of compensation for themselves. They noted that the research staff’s optimal functioning could be enhanced by compensating field staff consistently as scheduled. In terms of transportation, they suggested strategically assigning field staff so at least one individual in a group has reliable personal transportation.

Study logistics and fieldwork support

Logistical challenges surrounding storage of bio-samples collected for the first time in JHLS III were also identified as a barrier to data collection. Samples were not collected for transportation to the laboratory on time resulting in data collectors having to find alternate means for the storage of samples (e.g., at home in refrigerator). The temperature in some areas was not conducive to sample collection, made it difficult to maintain and store samples collected for use resulting in samples becoming no longer viable. Issues of adequacy of sample collection transportation and storage may indicate a failure to properly apply the study protocol because of delayed resources or a break down in following implementation guidelines.

Participants recommended that appropriate and accommodating arrangements be made to provide to collect, transport, and store samples in a timely manner. One practical strategy they suggested was to have a supervisor in every parish (Jamaica’s main local units of government; Jamaica has 14 parishes) who would also adopt the responsibilities of a team leader to reduce delays with request for equipment as well as more efficiency in addressing challenges experienced in the field. Simplified, consistent, and efficient logistical arrangements save the time and energy not only of the data collectors but also the participants and coordinators of the study[8].

Logistical challenges in the field and complaints of lack of supervisory support have implications for the adequacy of the study design and/or its implementation. The issue of logistical challenges can waste time and frustrate interviewers. Logistical problems can be logistical challenges affecting recruitment and data collection can be minimized by having a core facility, agency, or staff that

provide administrative support including timely disbursement of funding for supplies, equipment, transport, and remuneration.

Overall study findings

Several themes emerged overall regarding the JHLS study, its composition, and implementation practices that facilitated and detracted from recruitment and retention. These themes included study branding and study promotion, reaching males, questionnaire length, incentives, and accessing high SES communities. These themes are discussed in relation to challenges and recommended strategies.

Study branding

The lack of a study brand with a study logo was reported in all focus group types as a major concern. The use of study branding and a study logo were identified and vigorously recommended as good strategies to boost credibility and public interest in the study. It was recommended that field staff wear study branded shirts and identification badges. This branding was also identified as vital to addressing the security concerns of potential participants who are usually wary of being scammed or being approached as a ruse to being the target of criminal activity. Branding was noted as a key tactic to facilitate trust within the public. One research nurse suggested: “*We should have shirts with the name of the study... a logo this will help people feel safer when you approach them...*” Branding may also enhance staff identify with the study, facilitate a sense of team and lead to improved communication and relationships with participants.

Study promotion at national and local levels

All participants indicated that biomedical and health studies are not adequately promoted or advertised at the national and community levels. Discussants indicated that public promotion of the study—prior to active recruitment, before study staff entered the field, and during active data collection in the field—is essential for optimizing recruitment and retention. One past JHLS III study participant shared that it is important to: “*... let persons know before ‘we gonna be doing this study, and you know, you can expect researchers to be coming in your area’...*” Participants emphasized that newspapers, flyers, and pamphlets were necessary but insufficient and less effective promotional and recruitment strategies. Instead, they recommended that radio and television (e.g., infomercials) be the strategies used to increase national public awareness and engagement. They proposed placing study announcements on both radio and television during prime time news and morning talk shows. Additional

recruitment strategies included using electronic news tickers or crawlers to advertise on screens during major national or local events. They suggested that communities can be sensitized using social media and town criers: *“TV and the social media because most young persons on social media.”* An additional recommendation to attract more persons to participate was to offer and provide medical screenings, e.g., HIV testing, as part of the data collection process.

Study promotion to reach male participants

In relation to recruiting more male participants, all focus groups recommended targeting bars and male-focused civil societies for older males; as well as partnering with barber shops, male-focused retail establishments, e.g., home improvement and auto-vehicle stores, the sporting industry, and games/competitions (e.g., football) as a means to capture more interest in the study from Jamaican boys and men. As one participant suggested: *“Go to the places where men frequent like bars and the gambling houses. Get persons to sensitize them.”*

Questionnaire length

The length of the questionnaire and corresponding time needed to complete was identified as a challenge to participation. Discussants suggested adopting sections of the questionnaire for self-administration via hard or electronic copy including mobile platforms that participants could complete at their convenience.

Incentives

Discussants identified both monetary and non-monetary incentives as critical to optimizing participant recruitment and retention. While they did not identify a specific dollar amount that would be adequate, they suggested that monetary compensation should reflect the participants' contributions of time, effort, and long-term engagement in the study. They indicated that non-monetary incentives for participating and remaining in the study should include reporting of findings to the community, provision of vouchers for discount for medication at pharmacies, phone credit for calling to follow up on appointments or facilitating access and utilization of medical care, i.e., screening, surveillance and follow-ups at health centers/facilities: *“Give a voucher that discount ten percent at the pharmacy, because that way you get more people.”* Incentives are typically based on the cultural and socioeconomic variables among the target population. The provision of access to screening tests not related to the study—such as HIV testing—featured in this project and has been recommended in other studies [9, 10].

Study promotion for high socioeconomic status (SES) communities

Research staff focus group discussants reported challenges recruiting in high SES communities. These communities are often gated and difficult to gain entry. The high number of persons who are employed outside the home in these communities also created challenges to find participants at home. Study staff FGD participants suggested targeted study promotion for high SES communities using community-specific organizations such as service clubs (e.g., Rotary clubs) or neighborhood watch groups. They advised that it would be strategic to enlist the help of gatekeepers from target high SES communities. A participant from the research nurses FGD noted: *“once they find that citizens association President, he or she is the link to that community.”* Additionally, participants recommended using electronic platforms and mobile applications for data collection with this target demographic rather than face-to-face interviews.

Participant-specific findings

There were six main themes emerging from the analysis of participants' perspectives of their experience with the JHLS III study as well as their attitudes toward various types of studies. These themes included: feedback to participants, reaching urban high socioeconomic status participants, attitudes to behavioral and epidemiological studies, bio-banking, and clinical trials.

Feedback to participants

Discussants identified the failure to provide results to JHLS III participants as a major issue of concern. Participants expressed dissatisfaction with the lack of health screening results provided from the study. A participant from the urban FGD stated *“there was no dialogue, no follow-up until Miss XXX came again and we made a complaint to her that we didn't really receive any result then we started to see where it was going somewhere.”* On the other hand, a minority of participants indicated that they had received their results and in a timely manner. Participants emphasized that results should be provided in a timely manner, particularly for participants whose results indicate serious health risks. Recommendation were made for results to be made available at health centers in the communities, through email, or at designated health facilities where participants could gain access to their results with proper identification.

Reaching urban high SES participants

Safety and security, professionalism of researchers, confidentiality, and time of day were the main themes that

emerged among high SES urban participants in relation to the JHLS. Participants' primary concern was reassurance of safety and security in participating in the biomedical studies *"I saw the gentleman and did not know what he is about I was very uncomfortable"* (Participant, FGD High SES). Participants complained about lack of promotion and raising awareness of the study before entering the community. They recommended that the study team gain access to high SES communities through strata corporations, and advertising through business and church groups in the community. Participants especially those with full-time jobs, requested more flexible interview scheduling that took into consideration that many of them worked during the day. Professionalism, proper identification, and allowing opportunities for participants to verify the identity of the researcher with company, were also noted as important for recruiting participants from these communities. Discussants noted the importance of allowing the participant to indicate their preference, if any, for the sex of the data collector. They also spoke about the need for those doing the collection of the bio-samples to be highly skilled as otherwise the participant could experience pain and/or discomfort and lose trust in the research project in general. The use of a mobile application to collect data was not regarded favorably among high SES participants, with a number noting concerns about confidentiality and a preference for face-to-face interactions.

Attitudes toward behavioral and epidemiological studies

Participants were generally appreciative of epidemiological and behavioral studies and noted that there were several benefits to be gained such as increased awareness of how one's personal (e.g., practice, lifestyle) and contextual (e.g., living situation, neighborhood) characteristics contribute to their health risk and health status or conditions, and access to and quality of medical care. They also noted that participating in these studies may sometimes offer low-cost or free direct services, e.g., health procedures and tests that they may have otherwise been unable to access and/or afford. Participants shared that these studies can provide health intervention, e.g., education and skills and resources to promote health behavior change ideas and practice. For example, a participant of a rural FGD stated *"when we do these blood tests we know what is going on and then we can take the necessary steps to go forward concerning our health."* On the other hand, they noted that the studies are time-consuming to complete and that results were not provided to participants in a timely fashion.

Attitudes toward biomedical research

Most participants had some familiarity with biomedical research. Participants had mixed responses regarding their

willingness to provide blood and other tissue samples for such research. They were more willing to provide urine and saliva than blood. They noted a fear of needles or uncertainty about the competence of the research staff collecting the sample. Some persons were more willing to give samples if they had a history of providing blood samples at their health clinic. For example, a participant from the urban FGD stated, *"When I do the blood test I'm not scared because when you take it at the clinic they send you somewhere to take a bigger one, ... Am comfortable with them."* Both participants with and without a history of providing blood samples noted a major concern related to the storage of the samples. Willingness to participate in biomedical research was affected by concerns about where and for how long samples would be stored, and particularly who would have access to the samples. These concerns were related to samples being used for none-health related research or research that would not benefit the donor or the local community. Participants indicated that they would be more willing to participate in these studies if they are informed of the benefits to themselves: *"They explained the value. I was thinking that if anything was there it would show up in the testing, right, and that would be much better for me"* (Rural participant FGD).

Attitudes toward Bio-banking

Most participants had indicated that they had never participated in a bio-banking study before but had mixed views on the benefits of bio-banking. Some persons indicated that samples could be used for medical research to find a cure to chronic diseases and other medical conditions and to improve medications. This was conveyed succinctly by a participant of the urban participants FGD:

... sometimes you have certain things and it can be passed down to your children.

So suppose my blood can help to solve that. You come back and say well a found something in your blood and I would like to test your children and see if whatever, whatever. So, I think it is a good thing.

Others were skeptical about storage and ethical use of their samples over time.

Attitudes toward clinical trials

Most participants indicated that they had never participated in a clinical trial. A number of JHLS III participants failed to grasp the concept even after several examples and explanations of the terms were given. Most persons indicated that the concern for potential side effects of new drugs was a major deterrent to participation in a clinical trial and as such these issues would have to be addressed. A female

participant of one of rural FGDs explained: “... *if it's like a diet or exercise as you said then umm I would try it but if it's something, a surgery or like medication or so, if you can't tell what the side effects going to be, because if it's a trial then I wouldn't want to...*” Clinical trials that were less invasive seemed to be preferential among past JHLS III participants.

Conclusion and recommendations

Our findings emphasize the importance of creating and sustaining well-functioning research teams using traditional and social media promotion, applying gender-appropriate and personalized approaches as well as strategies for reaching the less accessible socioeconomic groups to recruit and retain members of a Caribbean cohort. Similar recruitment strategies are recommended by Carroll et al. [11] in their review article on successful retention strategies applied in physical activity intervention and research. These authors identified partnering with influential organizations, groups, and stakeholders, engaging well-trained study staff and using multiple advertising media as promising retention strategies. Incentivizing participation beyond altruism is also of importance. For example, the provision of HIV testing and other screening is of particular value in the Jamaican/Caribbean setting where men have displayed poor health seeking behaviors compared to women [12] and are less likely to visit public and private health facilities for screening services. Studies recommend advertising these screening tests to engage male participants [13]

Key findings of our study emphasize the early engagement of key stakeholders/gatekeepers in the research planning process to facilitate reach in the less accessible communities. Bamidele et al. [14] likewise identified flexible, strategic, culturally sensitive approaches as important facilitators of recruitment of “hard to reach” Black or Caribbean populations. Like the study staff in this study, the researchers in Bamidele’s study of recruiting Black men with prostate cancer noted that building rapport with participants and good interpersonal skills of the interviewers were important in recruiting and retaining hard to reach participants. An additional key finding is the importance of feedback to participants and how it coalesces with participants’ attitudes to epidemiological and biomedical research. The complaints of many participants about not receiving results of screening tests clearly affects their attitudes to participation and indirectly to their perception of the usefulness of the research. This expected feedback if delivered has the potential to also enhance their understanding (lacking among participants in this study) of the value of bio-banking. Moorcraft et al. [15] study showed that patients were motivated to participate in clinical trial

when they perceived personal benefits to themselves and others including accessing health screening. Feedback to participants, potential for improved care, and altruism featured as effective incentives for participation in biomedical research by Parkinson [16] et al. and Mfutso-Bengo et al. [17] emphasized the importance of studies designed with efficient participant feedback loops.

Feedback from these focus groups has been incorporated into the strategy for the LIFE study. These include a longer, more rigorous training program, (currently being done online), with the institution of a mock interview by a research nurse before commencing fieldwork. We have also removed responsibility for bio-sample collection from the interviewers, with this activity now being undertaken by medical technologists who can take responsibility for transportation, storage, and processing at the required protocol. Field sites are also being established in rural communities to facilitate this process. Research nurses have been incorporated into the study team and they are able to answer health queries and explain preliminary findings from laboratory and other measurements being performed as part of this study. A larger core team of research assistants and nurses is also available to provide interviewers with better field support. A system for rapid turn-around of laboratory and other reports has also been instituted—with participants being provided with a written report and a folder for storage of this and other health data. A strong media campaign is being planned and implemented to increase awareness of the study at a national and community level. A range of incentives including telephone credit and town hall meetings on health issues will be provided to participants.

The recent COVID-19 pandemic has created some new unanticipated challenges for this study. The ability to establish a rapport with participants is more difficult with limited face-to-face contact in the field. The pandemic has however provided us with an opportunity to test some of the other approaches to enrollment including self-completion of the questionnaire as well as administration of the questionnaire by video-conference or telephone. The length of the baseline questionnaire may present a problem and strategies to address challenge are being explored. A smaller core staff has now taken responsibility for field measurements (blood pressure, anthropometry, and bio-sample collection) due to limitations in access to PPE for research purposes. Face-to-face community meetings will now be held online and could provide participants with greater flexibility to engage in this aspect of the study. It can also provide us with an opportunity to tap into a wider pool of facilitators who can address health issues of interest—including members of the Jamaican Health Diaspora. Social issues brought on by economic downturn have also made recruitment of participants more challenging in low as well as high SES communities. The most effective use of the budget for participant incentives is

currently being re-evaluated for some communities in light of these developments.

These findings from these focus groups will serve to inform as well as enhance our ability to recruit and retain participants in the LIFE project and studies in other Caribbean and US Black populations. As we implement strategies that are responsive to the findings from this investigation and plan to evaluate the effectiveness of these strategies relative to historical enrollment and retention rates in Jamaica and can also provide important lessons in recruitment and engagement in times of national and international disasters.

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Data availability The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Conflict of interest The authors declare that there is no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of The University of the West Indies, Mona Campus Research Ethics Committee, and the Jamaica Ministry of Health and Wellness Advisory Panel on Medico-Legal Affairs.

Informed consent All participants provided voluntary consent recorded on signed consent forms.

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