

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

Is sports-branded screening effective in identifying adults at greatest risk of developing cardiovascular disease: A convergent parallel mixed-methods design to identify adults at greatest risk of developing cardiovascular disease using an opportunistic sports-branded health screening approach in the community.

Authors

Jones, Ian David; Fitzsimmons , Deborah; Musa, Massirfufulay Kpehe; Carroll, Paula; Smith, Emma Johnston; Clowes, Miriam; Carr, Jess; Fulstow, Andrew; Yates, James; Lip, Gregory YH

VERSION 1 - REVIEW

Reviewer	1
Name	Darroudi, Susan
Affiliation	Mashhad University of Medical Sciences
Date	19-Aug-2024
COI	none

The original article entitled “Is sports-branded screening effective in identifying adults at greatest risk of developing cardiovascular disease: A convergent parallel mixed-methods design to identify adults at greatest risk of developing cardiovascular disease using an opportunistic sports-branded health screening approach”

The introduction effectively outlines the importance of sports-branded CVD health screening. The study design is well-described, with sample selection conducted from Liverpool Football Club Foundation events, focusing on cardiovascular risk factors. The statistical methods are appropriate for the study. The results section is detailed and presents significant findings effectively. The discussion contextualizes the findings within existing literature, highlighting their significance and potential implications for clinical practice. In Conclusion, the summary succinctly outlines the key findings and their relevance, emphasizing the potential CVD risk factors and the need for lifestyle changes

However, I would like to suggest a few revisions to enhance the clarity and impact of your manuscript:

I suggest to merge tables 1, 2 and 3

It is better to report mean biochemical markers, BMI and blood pressure for the total population

Provide the number and caption for the figure, and improve its format

Reviewer	2
Name	Bernhardt, Lizelle
Affiliation	Leicestershire Partnership NHS Trust, Enabling Services/Clinical Academic Team
Date	22-Nov-2024
COI	No competing interests

Thank you for the opportunity to review this manuscript. Overall, this is a well-designed and executed study that provides valuable insights into whether the public would engage with sport-branded health screening and their experiences with such initiatives. The study addresses an important and under explored area, offering practical implications for future health promotion/screening strategies.

Strengths:

1. The study design is robust, employing appropriate methods to explore public engagement and experiences with sport-branded health screenings.
2. The findings are clearly presented and provide actionable evidence for policymakers and practitioners aiming to increase participation in preventative health services.
3. The incorporation of participant feedback adds depth and authenticity to the results, allowing for a nuanced understanding of user experiences.

Suggestions for consideration:

1. Ethnic Diversity as a Limitation

One area for consideration is the lack of ethnic diversity within the study population, which may limit the generalisability of the findings. Exploring whether cultural or community-specific factors influence engagement with sport-branded health screenings could provide more comprehensive insights and support the development of inclusive interventions.

2. Discussion on Scalability

While the study effectively evaluates public engagement, discussing the feasibility of scaling sport-branded health screenings across different communities and settings could strengthen the manuscript's practical contribution.

Overall, this paper represents a significant step forward in understanding the intersection of sports branding and public health engagement. Addressing the points above could further enhance its impact and applicability to a wider audience. I commend the authors for their work and look forward to seeing how this research develops in the future.

VERSION 1 - AUTHOR RESPONSE

mean biochemical markers, BMI and blood pressure for the total population	Added to table below																																						
merge tables 1, 2 and 3	<p>Tables merged and means and SD added Line 352</p> <table> <tr> <th>Age</th><th>Percentage of sample</th></tr> <tr> <td><30</td><td>10%</td></tr> <tr> <td>30-39</td><td>28%</td></tr> <tr> <td>40-59</td><td>42%</td></tr> <tr> <td>60-75</td><td>16%</td></tr> <tr> <td>>75</td><td>5%</td></tr> </table> <table> <tr> <th>BMI measurement</th><th>Percentage of sample (%)</th></tr> <tr> <td><18.5 underweight</td><td>2%</td></tr> <tr> <td>18.5 - <25 normal weight</td><td>28%</td></tr> <tr> <td>25 - <30 overweight</td><td>32%</td></tr> <tr> <td>30 - <35 Class 1 obese</td><td>23%</td></tr> <tr> <td>35 - <40 Class 2 obese</td><td>9%</td></tr> <tr> <td>>40 class 3 obese</td><td>6%</td></tr> </table> <table> <tr> <th>Variable</th><th>Percentage of sample with results outside normal range (%)</th></tr> <tr> <td>Total Cholesterol</td><td>41.5% High cholesterol (M=4.7621, SD=1.17256)</td></tr> <tr> <td>High Density Lipoprotein</td><td>37% High HDL (M=1.1849, SD=.36965)</td></tr> <tr> <td>Triglyceride</td><td>22% High Triglyceride (M=1.7861, SD= 1.29174)</td></tr> <tr> <td>Low Density Lipoprotein</td><td>40% Low LDL (M=2.7792, SD= .94606)</td></tr> <tr> <td>Non-HDL cholesterol</td><td>34% High non-HDL (M= 3.5952, SD=1.12200)</td></tr> </table>	Age	Percentage of sample	<30	10%	30-39	28%	40-59	42%	60-75	16%	>75	5%	BMI measurement	Percentage of sample (%)	<18.5 underweight	2%	18.5 - <25 normal weight	28%	25 - <30 overweight	32%	30 - <35 Class 1 obese	23%	35 - <40 Class 2 obese	9%	>40 class 3 obese	6%	Variable	Percentage of sample with results outside normal range (%)	Total Cholesterol	41.5% High cholesterol (M=4.7621, SD=1.17256)	High Density Lipoprotein	37% High HDL (M=1.1849, SD=.36965)	Triglyceride	22% High Triglyceride (M=1.7861, SD= 1.29174)	Low Density Lipoprotein	40% Low LDL (M=2.7792, SD= .94606)	Non-HDL cholesterol	34% High non-HDL (M= 3.5952, SD=1.12200)
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	LDL/HDL ratio	54% High LDL/HD: ratio (M=3.0934, SD= 1.78428)
	Glucose	2% High Glucose (M= 5.8121, SD= 1.53900)
	Blood pressure	20% High Blood pressure Systolic BP M= 127.82, SD= 12.131 Diastolic BP M= 71.93, SD= 11.872
While the study effectively evaluates public engagement, discussing the feasibility of scaling sport-branded health screenings across different communities and settings could strengthen the manuscript's practical contribution.	<p>Added Line 623</p> <p>The findings from this study provide a rationale to evaluate further the validity, feasibility, and clinical value of a mass community screening programme. Expansion of the research to include a wider range of people from different underserved populations would provide greater insight into the different cultural or community-specific factors that may influence engagement with health screening, and provide more comprehensive insight, supporting the development of inclusive interventions.</p>	
Ethnic Diversity as a Limitation- One area for consideration is the lack of ethnic diversity within the study population, which may limit the generalisability of the findings. Exploring whether cultural or community-specific factors influence engagement with sport-branded health screenings could provide more comprehensive insights and support the development of inclusive interventions.	<p>Added- Line 81</p> <p>A further limitation is the lack of ethnic diversity within the study population, which may limit the generalisability of the findings.</p>	

VERSION 2 - REVIEW

Reviewer 2

Name Bernhardt, Lizelle

Affiliation Leicestershire Partnership NHS Trust, Enabling Services/Clinical Academic Team

Date 26-Feb-2025

COI

Thank you for addressing the reviewer feedback.