ISRCTN14367716 https://doi.org/10.1186/ISRCTN14367716

Understanding the impact of exposure to health and medicines misinformation on public trust in the pharmaceutical industry: a UK mixed-methods study (PHARMAFICTION)

Submission date
02/06/2026

Recruitment status
Recruiting

Registration date
13/07/2026

Overall study status
Ongoing

Last Edited
05/08/2026

Condition category
Other

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
False information about medicines and the pharmaceutical industry — sometimes called misinformation (shared by mistake) or disinformation (shared on purpose to mislead) — spreads quickly online and through social media. During the COVID-19 pandemic, false claims about vaccines and treatments led some people to delay or avoid medical care. Beyond the pandemic, this kind of false information continues to shape how people think about medicines, the companies that make them, and the rules that govern them.
This study aims to find out what adults living in the UK know, think, feel and do about misinformation and disinformation relating to medicines and the pharmaceutical industry. The researchers want to understand how it affects people's trust in medicines, whether it changes how people take their medicines, and what could be done to tackle the problem.

Who can participate?
Adults aged 18 years and over who live in the UK, speak English, and can access the survey online using a smartphone or computer. People who cannot give informed consent (for example, due to a learning disability or dementia) are not able to take part.

What does the study involve?
Taking part involves filling in a short online survey that takes about 10 minutes. The survey asks about your views and experiences regarding medicines, the pharmaceutical industry, and false information you may have come across. All answers are kept confidential and pseudonymised, meaning your name is not linked to your answers.
A smaller group of 10 to 15 people who complete the survey will also be invited to take part in a 30 to 45 minute interview by telephone, Zoom or Microsoft Teams. The interview explores the same topics in more depth. Taking part in the interview is optional — you can complete just the survey if you prefer.

What are the possible benefits and risks of participating?
There are no direct benefits to taking part, but participants will be helping to build a better understanding of how false information about medicines affects the public, which could inform future communication and regulation in the pharmaceutical sector. The survey and interview do not ask about illness, pain or other sensitive personal health topics, so the risks of taking part are very low. Participants can stop the survey or interview at any time without giving a reason.

Where is the study run from?
Imperial College London (UK)

When is the study starting and how long is it expected to run for?
April 2026 to April 2028

Who is funding the study?
The study is not externally funded. It is being run by the research team at Imperial College London.

Who is the main contact?
Dr Austen El-Osta, a.el-osta@imperial.ac.uk

Contact information

Type(s)
Principal investigator, Scientific, Public

Contact name
Dr Austen El-Osta

ORCID ID
https://orcid.org/0000-0002-8772-4938

Contact details
Self-Care Academic Research Unit (SCARU), Primary Care & Public Health, School of Public Health, Wood Lane
London
United Kingdom
W12 0BZ
+44 20 7594 7604
a.el-osta@imperial.ac.uk

Additional identifiers

Integrated Research Application System (IRAS)
369178

Central Portfolio Management System (CPMS)
73549

Study information

Scientific Title
Mapping the effects of disinformation on trust in medicines and the pharmaceutical sector

Acronym
PHARMAFICTION

Study objectives
Research question:
What are the knowledge, attitudes, perceptions and behaviours (KAP-B) of community-dwelling adults in the UK regarding pharmaceutical misinformation and disinformation, and what impact does this have on trust, medicine use, and the credibility of the pharmaceutical industry?

Primary aim:
To characterise the scope, narratives and impacts of pharmaceutical misinformation and disinformation across the UK, in order to generate evidence that informs industry strategy, strengthens regulatory responses, and enhances public trust in medicines.

Secondary aims:
1. To assess how pharmaceutical mis/disinformation affects public trust, perceptions of industry credibility, and patterns of medicine use or adherence
2. To identify regulatory and policy barriers, as well as opportunities, for more effective responses to mis/disinformation by pharmaceutical stakeholders
3. To map differential impacts of mis/disinformation across demographic groups and communication channels, highlighting populations and touchpoints most vulnerable to harm

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 08/10/2025, Imperial College London Research governance and integrity (Level 1, The Media Works, 191 Wood Lane, London, W12 7FP, United Kingdom; +44 (0)20 7594 9480; rgit@imperial.ac.uk), ref: 8061247

Primary study design
Observational

Secondary study design
Cross sectional study

Study type(s)

Health condition(s) or problem(s) studied
Exposure to health misinformation and disinformation; public trust in medicines and the pharmaceutical sector; health literacy and behaviours of community-dwelling adults regarding medicine use.

Interventions
This is a 36-month mixed-methods observational study comprising two components:

1. Electronic survey (quantitative). Approximately 50,000 community-dwelling adults across the UK will be invited to complete a short (~10 minute) pseudonymised electronic questionnaire

hosted on Qualtrics. Recruitment will be via SMS/email invitations, posters with QR codes, and social media advertisements (Twitter/X, Facebook), disseminated through local stakeholders including academia, Community Trusts, faith groups, local community organisations, and the NIHR Be Part of Research (BPoR) network. Participants will be presented with the participant information sheet, anonymity statement and consent statement before commencing the survey. The survey will assess knowledge, attitudes, perceptions and behaviours (KAP-B) relating to pharmaceutical misinformation and disinformation, including demographic data (age, gender, ethnicity, first segment of postal code, employment status).

2. Semi-structured interviews (qualitative). A purposive subsample of 10–15 survey respondents who indicate willingness will be invited to participate in 30–45 minute semi-structured personal interviews conducted via telephone, Zoom or Microsoft Teams. Interviews will explore in greater depth participants' experiences of mis/disinformation, perceptions of pharmaceutical industry credibility, and views on the role of pharmacies in countering misinformation. Interviews will be audio-recorded and transcribed using Microsoft Teams' transcription functionality, with recordings deleted shortly after transcription.

3. Data analysis. Quantitative survey data will be analysed using routine descriptive statistical methods. Qualitative interview data will be analysed thematically to identify main and emergent themes. Findings will be triangulated across both data sources.

All data will be pseudonymised, stored securely on encrypted Imperial College London institutional servers, and retained for a minimum of 10 years post-study completion in line with GDPR and the Data Protection Act 2018.

Intervention Type
Other

Primary outcome(s)
1. Prevalence of self-reported behaviour change attributed to health misinformation and disinformation among community-dwelling adults in the UK measured using Self-reported responses captured via a pseudonymised electronic questionnaire (Qualtrics), analysed using descriptive statistical methods at Measured cross-sectionally at the point of survey completion (single timepoint per participant)

Key secondary outcome(s)
1. Emergent themes regarding knowledge, attitudes, perceptions and behaviours towards health misinformation, and the perceived role of pharmacies in tackling misinformation in community settings measured using Thematic analysis of transcribed semi-structured interviews at At completion of the qualitative interview phase

2. Impact of pharmaceutical or health mis/disinformation on public trust, perceptions of industry credibility, and patterns of medicine use or adherence measured using Self-reported responses via Qualtrics eSurvey, analysed using descriptive statistics, triangulated with qualitative interview findings at At point of survey completion (survey) and at completion of interviews (qualitative)

3. Differential impacts of health or pharmaceutical mis/disinformation across demographic groups and communication channels measured using Subgroup descriptive analysis of survey data by demographic variables (age, gender, ethnicity, region, employment status) and reported sources of mis/disinformation at At point of survey completion

4. Proportion of survey respondents willing to be contacted for a personal interview measured using Count and proportion of survey respondents providing contact details at the end of the Qualtrics eSurvey at At point of survey completion

Completion date
01/07/2029

Eligibility

Key inclusion criteria
1. Individuals aged 18 years and over
2. Individuals who reside in the United Kingdom
3. Individuals who are willing and able to provide informed consent and participate in the study

Healthy volunteers allowed
Yes

Age group
Mixed

Lower age limit
18 Years

Upper age limit
99 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/07/2026

Date of final enrolment
01/07/2028

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Imperial College London
Department of Primary Care & Public Health, School of Public Health, Imperial College London, White City Campus, 80–92 Wood Lane
London
England
W12 0BZ

Sponsor information

Organisation
Imperial College London

ROR
https://ror.org/041kmwe10

Funder(s)

Funder type

Funder Name
Imperial College London

Alternative Name(s)
Imperial College of Science, Technology and Medicine, Imperial College London, UK, Imperial College London, London, England, Imperial College London in United Kingdom, imperialcollege, ICL

Funding Body Type
Government organisation

Funding Body Subtype
Universities (academic only)

Location
United Kingdom

Funder Name
National Institute for Health and Care Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Other files	Consent form version 0.2	01/10/2025	02/06/2026	No	No
Other files	Survey questions version 0.3	20/10/2025	02/06/2026	No	No
Protocol file	version 0.1	04/07/2025	02/06/2026	No	No