Acceptability of multi-cancer early detection (MCED) blood tests as a population-based screening programme: A qualitative study in Great Britain

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Background

Trials are underway to assess the clinical effectiveness of multi-cancer early detection (MCED) blood tests in asymptomatic individuals.[1]

Understanding the acceptability of a new screening test in the target population is vital to ensure successful implementation.

Acceptability can include attitudes to the intervention, beliefs about ethicality, perceived effectiveness and anticipated burden.[2]

We sought to understand the public acceptability of MCED blood tests and potential barriers and facilitators to participation.

Methods

- We conducted 11 online focus groups with 50–77-year-olds.
- Participants were purposefully sampled to include a range of socio-economic and ethnic backgrounds and some participants who would not want a blood test for cancer.
- Participants were shown information about MCED blood tests and asked to discuss their views.
- Reflexive thematic analysis[3] was used to identify themes across the groups and was aided by NVivo 1.7.

Table 1: Characteristics of the sample (n=53)

	n
Sex	
Female	28
Male	25
Age	
50-59	27
60-69	14
70+	12
Ethnicity	
Any White background	24
Other ethnic background	29
Screening attendance	
Never had screening	26
Attended some but not all	10
Attended all	16

Results

Procedural familiarity and multi-cancer testing makes sense

- Enthusiasm about MCED screening was driven by familiarity with blood tests
- Participants were pleased to screen for multiple cancers at once

I've had a lot of blood tests over the years. So it wouldn't bother me in the slightest [F, 54, G9]

Cancer is an increasing risk and early detection is beneficial

- Participants believed that their risk of cancer was increasing as they aged and valued early detection to improve cancer outcomes

From 50 onwards, you're in an age group that... you can, like, get cancer [F, 51, G9]

Anticipated anxiety

- Anxiety was anticipated at several stages including waiting for and receiving results
- For some, having follow-up tests but no cancer found would break their trust in MCED screening, resulting in future non-participation
- Some felt having a positive signal, but no cancer found, might lead them to live "in fear" that cancer might "manifest" in the future
- Most considered this anxiety to be "worth it"

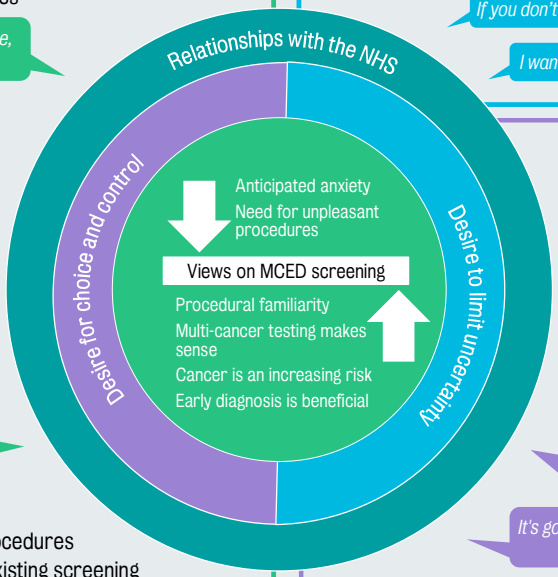
Because my anxiety would be through the roof... all that waiting would be quite nerve wracking [F, 51, G8]

Avoiding unpleasant procedures where possible

- Participants were keen to reduce unpleasant procedures
- Blood tests were seen as less unpleasant than existing screening
- Needing to attend current screening as well as MCED screening was considered "disappointing"

If we're still going to have to have the other tests as well, I don't see the point [F, 57, G5]

- The potential for MCED screening to catch cancer earlier and reduce the need for unpleasant treatments was seen as a benefit
- For some, the prospect of any unpleasant medical procedures if cancer was found was a barrier to MCED screening



Desire to limit uncertainty

- MCEDs offered an opportunity to reduce uncertainty around cancer status
- Uncertainty was also reduced by familiar procedures (i.e. a blood test) offered in a familiar way (i.e. at a GP or hospital)
- Potential uncertainty about results and during the diagnostic period resulted in anticipated anxiety, which some would want to avoid
- The accuracy of MCED screening was identified as a potential source of uncertainty

If you don't know you've got it then you can't do anything about it [M, 71, G1]

I want to know... so the sooner I learn about it the better [M, 60, G2]

Desire for choice and control

- MCED screening was seen as a positive way to take control over one's health and risk of cancer
- This would give more choice over treatment if diagnosed with cancer
- A desire for choice and control extended to preferences for implementation of MCED screening e.g. appointments

It's fairly important to have early diagnosis of anything, because then you have the time to think through possible treatments and investigations [M, 55, G11]

It's got to be like, it's got to work in the way I work or when I want to go for it [M, 50, G1]

Relationships with the NHS

Perceptions of the NHS, including trust in the NHS and current NHS strain, impacted acceptability of an MCED screening programme and views on implementation

But I've got no trust in the NHS at all [F, 59, G7]

If they can't cope with existing ones, I can't see how they cope with all these new ones without getting more staff [F, 54, G4]

Key findings:

- Screening for multiple cancers at once and using a familiar procedure (blood test) were seen as key benefits to MCED screening.
- MCED screening could reduce uncertainty in relation to cancer and give people control over their health.
- Concerns about MCEDs were mostly around diagnostic follow-up procedures, cancer treatment, anxiety and test accuracy.

Implications

- If MCED screening is implemented, it will be important to support individuals to weigh up the benefits and risks of participation
- MCED screening will not be acceptable to all, and it is vital to ensure concerns regarding accuracy, unpleasant procedures and anxiety are respected

References
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