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ARTICLE COMMENTARY

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Commentary and methodological insights: Reaching girls/women, boys/men and vulnerable groups to maximise uptake for the Human papillomavirus vaccine

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ABSTRACT

The human papillomavirus (HPV) vaccine has been shown to be an effective cancer-prevention vaccine against oncogenic types of the HPV virus implicated in cervical, anogenital, and oropharyngeal cancers. Since Covid-19, there are global suboptimal uptake rates for the HPV vaccine. In high-income countries, there are persistently lower uptake rates among boys/men and vulnerable groups despite many countries now offering the HPV vaccine to both girls and boys in gender-neutral vaccine campaigns. It is important to understand the nuances with vaccine hesitancy and qualitative research approaches can be valuable to understand rich, contextual understandings in public health communication among hard-to-reach groups. This commentary draws insights from previous literature and our own research including two studies submitted to this Special Edition on Vaccine Communication. We consider the cultural context, gender and specific hard-to-reach groups in Scotland including those with an intellectual disability, sexual minorities, and ethnically diverse groups to draw some insights. Such groups may experience taboos and stigma in various guises. It is important that public health communication in given contexts is gender-inclusive and can incorporate messages that reach vulnerable groups. Cancer prevention communication delivered by trusted healthcare providers and community leaders are important strategies to deliver trusted messages.

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Human papillomavirus (HPV) is a common sexually transmitted virus among young adults. Oncogenic HPV strands (HPV 16/18) are implicated in the development of cervical cancer, anogenital cancers including anal, penile, vaginal, and vulval cancer and oropharyngeal cancers[1] affecting both men and women. Non-oncogenic HPV types are associated with genital warts.[1] Globally, there are suboptimal uptake rates of the human papillomavirus vaccine (HPV) which have been exacerbated since Covid-19.[2] Local contexts are important to consider in vaccine hesitancy, defined as delays and refusal to be vaccinated, despite vaccine availability.[3] Despite many high-income countries now offering the HPV vaccine to both boys/young men as well as girls/women, there are suboptimal uptake rates among some groups.[2] European contexts, for example, are especially vaccine skeptical for the HPV vaccine.[4] There are suboptimal uptake rates for the HPV vaccine among boys/young men and vulnerable groups.

In theories about vaccination behaviors, health behavior models have tended to focus on vaccine intentions for influencing behavior. However, there is understanding that vaccine intentions do not always result in vaccine behaviors and that such models may undermine variability.[5,6] Lyons[7] called for increased understanding of alternative points of view in vaccination research and the importance of understanding local and contextual understandings. Qualitative research can address deep, rich, contextual understandings about meanings and experiences of vaccination in socio-cultural and historical contexts[7] and is thus important in understandings about vaccine hesitancy. A range of qualitative approaches can be utilized to address this topic dependent on the research question and methodological assumptions (for example).[8] We note that vaccine hesitancy itself is a construct which is problematic to define and may be variable in different contexts and for different vaccines.[9,10] Vaccination itself is not neutral but develops within contexts; trust and vaccine decisions might not be seen as 'rational' but may make sense within local meanings.[11] We present a summary of qualitative research approaches in Figure 1 to reach vulnerable groups that we have adopted from our previous research. We take an eclectic approach to design and methods to enable participation and attend to local context and time. Through attention to rigor, credibility and trustworthiness, and systematic processes, qualitative research can attend to claims about transferability rather than generalizability and validity.

Vaccine policy and implementation is constantly in flux and develops within a particular socio-cultural, historical, and political context.[5,9] The HPV vaccine has been gendered given vaccine policy and historical considerations across the globe (for example).[12] Traditionally preadolescent girls were targeted prior to sexual debut to be most effective. Additional

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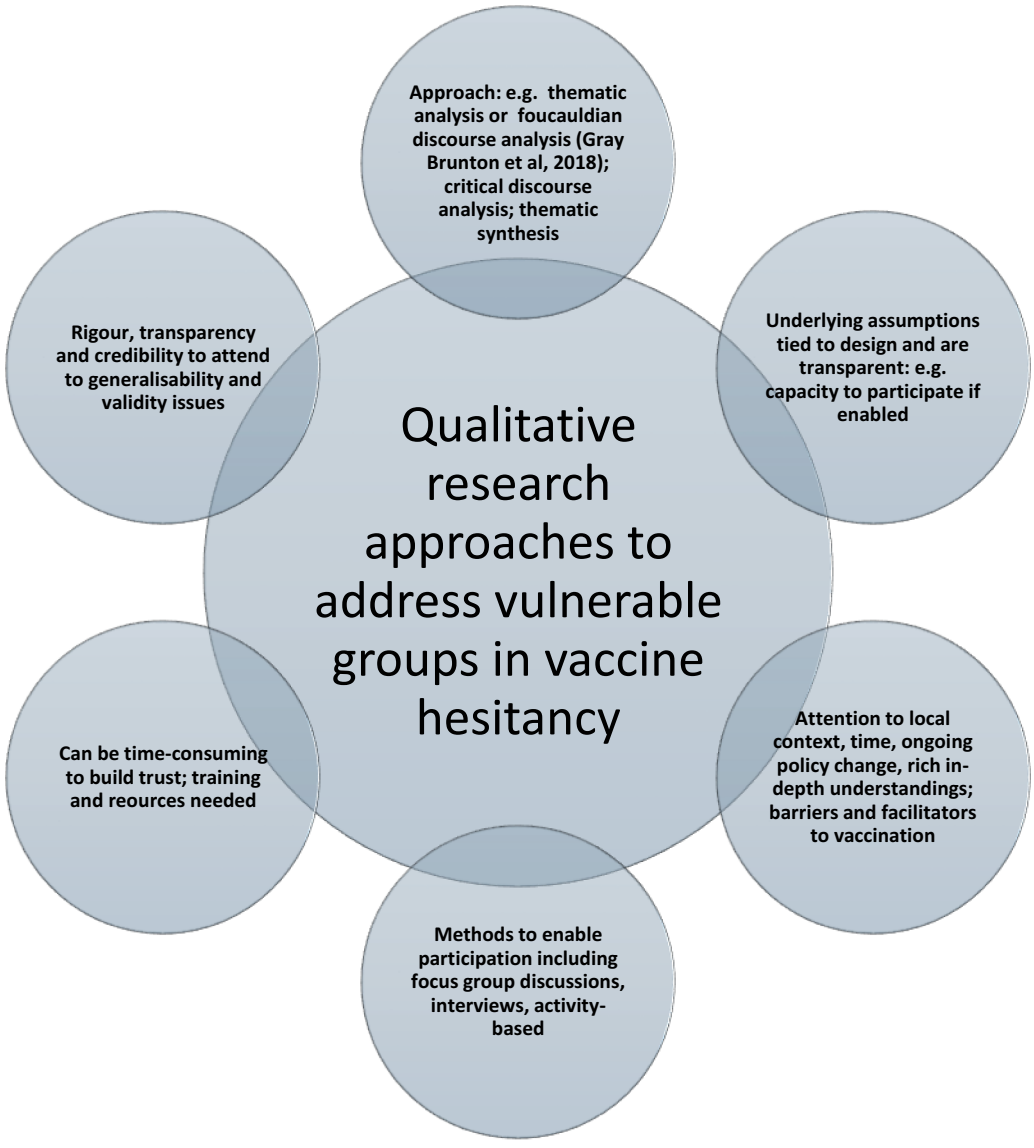

Figure 1. Qualitative research approaches used to reach vulnerable groups for vaccine hesitancy.

'high risk' subgroups were included in vaccine programs. In some contexts, gay, bisexual, men-who-have-sex with men (GBMSM) were eligible for the HPV vaccine given the higher prevalence of anal cancers, for example in Scotland. Many high-income countries are increasingly offering the HPV vaccine to boys/young men.[2] The HPV vaccine has been very successful in cervical cancer prevention for women in such contexts such as Australia and Scotland. For example, in Scotland there were no new cases of cervical cancer incidence among the HPV vaccine eligible cohort.[13] However, HPV accounts for nearly 5% of the worldwide burden of cancer every year.[1]

Results accumulated from several of our qualitative research studies have given some important contextual insights for reaching both girls/women and boys/men for the HPV vaccine. Here, we turn to discuss gender, context, and harder-to-reach groups within Scotland (intellectual disability, sexual minority, and ethnically diverse groups). Young women in different cultural contexts spanning Scotland, Spain, Bulgaria, and Serbia were found to take on a critical and vigilant approach to HPV vaccine decisions despite being excluded from either access or information.[5,14] They were keen to take on responsibility for decisions and took on moral decisions where they carefully weighed up different information sources. In keeping with general literature, trusted sources were seen to be from health professionals or authorities.[15] We noted young women took on the greatest burden of cancer prevention. By comparison to young women, boys/young men across the literature have shown limited knowledge and understanding about the HPV vaccine.[16] Despite being in contexts where the vaccine was on offer to them in high-income countries such as United States, boys/young men were uncertain about the importance and relevance of the HPV vaccine from a range of research given its 'feminisation.'[12,17] There is an opportunity for vaccine programs to afford boys/young men parity to share the burden for cancer-prevention, and there are calls for action to do so through global gender-neutral vaccination.[18]

It is important to consider vulnerable groups with wider populations and to target and reach these groups

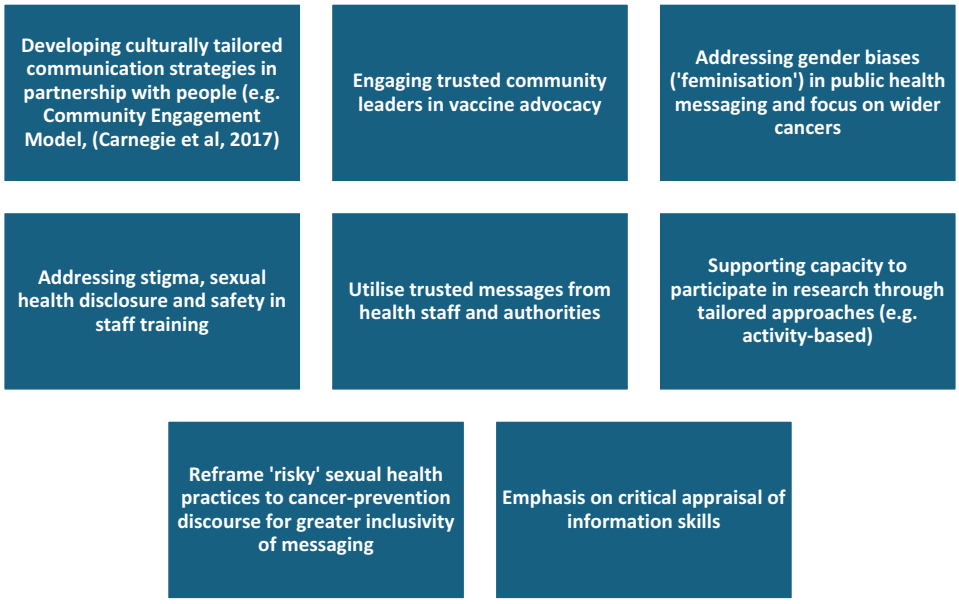

Figure 2. Summary of recommendations for reaching girls/women, boys/young men, and vulnerable groups for the HPV vaccine.

appropriately. For example, there is very little research conducted with people with an intellectual disability and their vaccine decisions and understanding. Our study reviewed current literature indicating a paucity of evidence including the HPV vaccine.[19] Our qualitative analysis with young men with a mild-moderate intellectual disability in Scotland showed that with facilitated and supported activity-based research topics, they could engage in the topic of HPV alongside other current affairs and hold opinions, despite not knowing what HPV was. However, it was important that they were supported to participate in such discussions rather than assume paternalistic attitudes about their sexual lives and capacity. Research among sexual minorities including GBMSM showed a similar lack of knowledge and understanding about HPV and the vaccine from several cultural contexts.[20] Our qualitative systematic review among GBMSM showed that while conversations about sexual identity were more acceptable in sexual health clinics, these were difficult to initiative in non-sexual health encounters and GBMSM experienced stigma related to having to disclose their sexual identity to be eligible for the HPV vaccine.[21] Other research among young people from ethnically diverse cultural backgrounds has important considerations regarding the relevance and applicability of the HPV vaccine to specific cultures. In our Scottish study among British, Asian, Minority Ethnic (BAME) groups,[22] we highlighted how young people (aged 18–26 years) took up HPV vaccine messaging regarding the vaccine as being more required for those who were sexually promiscuous and the various ways in which taboos and stigma surrounding the vaccine worked. We proposed a community engagement model to work intergenerationally with specific cultural groups and to involve trusted elders and community leaders for messaging to be more effective. In sum, taboos and cultural assumptions can be explored and addressed through working closely with subgroups who may have been reluctant to take up the vaccine to address these in larger group public health messaging in specific contexts. Figure 2 summaries our overall key recommendations to reach girls/women, boys/men, and vulnerable groups for the HPV vaccine.

In conclusion, the HPV vaccine is a powerful cancer-prevention tool against a range of cancers affecting both women and men. Cancer prevention communication delivered by trusted healthcare providers and community leaders are important strategies to deliver trusted messages. Reaching vulnerable and hard-to-reach groups for the HPV vaccine requires methodological considerations to reach and understand deep and nuanced meanings about vaccine hesitancy in order that these groups can feel included within broader public health messaging and for vaccine acceptance to be maximized.

Ethical approval

This does not apply to the current commentary piece which discusses previous research.

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