

## Short Communication

## Allied health professions public health research priorities: A modified e-delphi study in the United Kingdom

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## ABSTRACT

**Objectives:** This study identifies the United Kingdom (UK) Allied Health Professions (AHP) public health research priorities through a modified e-Delphi study conducted with an expert panel.

**Study design:** A modified e-Delphi study was utilised in this study.

**Methods:** This study used a modified e-Delphi approach to reach a consensus on research priorities. Expert panel members were invited to participate and complete three rounds of the e-Delphi. Ethical approval was obtained through the Public Health England Research and Evidence Governance Group.

**Results:** A total of 38 participants completed three rounds of the e-Delphi study between September and November 2020. Consensus was reached on nine AHP public health research priorities.

**Conclusion:** Several areas of AHP public health research were identified as priority, however, a number of priorities refer to the impact of AHP public health activities as opposed to empirical research. The identified priorities will be used to progress the AHP public health research agenda through a UK wide AHP public health strategy implementation group and through support and engagement from the AHP professional bodies and arm's length bodies.

## 1. Background

The UK Allied Health Professions (AHP) strategic framework [1] was published in May 2019 to set out a vision for the role of Allied Health Professionals in public health over the coming five years. The strategic framework is intended to help AHPs, as well as their professional bodies and partner organisations, to further develop their role in public health, share best practice with colleagues and partners and ultimately embed preventative healthcare across their work. The framework was the first UK wide AHP public health strategy, building on and superseding the previously published strategic documents for England [2] and Wales [3]. The strategic framework includes five goals and a number of key actions to achieve the ambition set out within the framework. The implementation of the UK AHP strategic framework is overseen through a UK wide AHP Public Health strategy group.

Goal two within the strategic framework states “Demonstrating impact: AHPs will be able to demonstrate their contribution to improved population level health outcomes through robust evaluation and research.” There is limited research on public health activities and impact of AHPs [4] and no clarity about research priorities in this area.

The aim of the e-Delphi study was to identify the AHP public health research priorities within the UK.

## 2. Study Design

The study was approved by the Public Health England Research Evidence and Governance Group (R&D405).

The Delphi method seeks to identify the opinion of experts to identify a consensus position [5]. It is a method that is based on a series of rounds in which an expert panel provide views on a particular issue. Experts are provided with results from each round to allow reflection on all responses and complete the subsequent round until a consensus is reached. The number of rounds undertaken and the definition of how a consensus is reached can vary between Delphi studies [5]. An e-Delphi is a modification to the traditional Delphi method, utilising online survey software to undertake the study.

An e-Delphi method was used to gain consensus and identify priorities from an expert panel through an iterative process of answering questionnaires (‘rounds’). A three-round e-Delphi approach was utilised. The e-Delphi was conducted during the period of COVID19, although

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some attrition from the study did occur, only five participants did not complete all three rounds of the Delphi. It is possible that due to the timing of this study that the COVID19 pandemic led to reconsidered research priorities.

The expert panel were recruited from the already existing AHP Public Health Strategy Board membership ( $n = 25$ ). Each member of the strategy board was asked to participate and to nominate up to five further members of their professional network including colleagues in practice, researchers, and academic colleagues who were deemed to have relevant knowledge and expertise associated with the topic.

A link to a participant consent form and a participant information sheet were included in the initial email circulated to members of the AHP strategy board and included in dissemination to wider colleagues invited to participate from the membership of the strategy board. Upon completion and return of the consent form, individuals were sent the initial round of the e-Delphi study for completion. In this round, participants were asked to identify a maximum of five research priorities, provided as written statements. Upon completion of this round, any statements that were not identified as research were removed and duplicates were combined. In round two, participants were sent the full list of anonymised (non-ranked) research priorities that had been provided across all expert panel members and asked to rate the importance of each priority between one and five using a Likert scale. Participants were given the option to rate all returned priorities but offered the option to select 'unable to assess this topic' if they did not feel that they had knowledge or experience to rate the importance of a particular priority. In round three, participants were provided with a revised list of research priorities (with average Likert score), defined as a mean score of  $3.75 >$  on the Likert scale and  $>70\%$  of participants scoring  $>3.75$  on the Likert scale.

### 3. Results and discussion

A total of 50 responses and completed consent forms were received in response to the invitation to participate email. From the original strategy board members, 17 colleagues completed the first round, the remaining 33 responses were received by those nominated by strategy board members. Fig. 1 demonstrates the attrition rate following initial response:

A total of nine research priorities were deemed to have reached a consensus:

1. The impact of AHP practice in reducing health inequalities (4.45)
2. Modelling of cost and outcome impact of AHP interventions focused on prevention or early interventions (4.21)

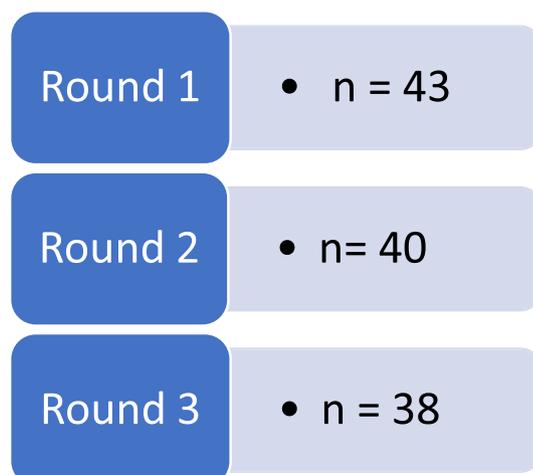


Fig. 1. e-Delphi response rate per round.

3. Identifying the impact of AHPs in improving population health (4.19)
4. Self-management and person led interventions/methods to enable people to prevent their own ill health and that of others - best approaches and practice to support change (4.19)
5. Identifying how effective AHP-led public health interventions can be scaled up (4.03)
6. The role of AHPs in promoting mental wellbeing (3.95)
7. Identification of the areas of AHP practice that have the greatest potential to improve public health (3.94)
8. The impact of the AHPs in improving health for older adults (independence, falls prevention, nutrition, dementia, social isolation, mobility) (3.86)
9. AHPs role in and impact of rehabilitation and long term self-management following COVID19 (3.81)

A number of the research priorities above do have a small body of evidence associated; however this is limited or the implementation is not researched. A recent rapid review and expert identification of the Allied Health Professions' interventions(4) as a contribution to public health outcomes only identified 11 studies for review, demonstrating the need for further improvement related to AHPs measuring the impact of their interventions which would reveal evidence of outcomes at population level. The limited research associated with the impact of AHP interventions is supported with the priorities identified in this study. Several of the research priorities identified in the e-Delphi study are associated with the impact of the AHP role or contribution to various public health activities.

The final priority identified through the e-Delphi study is associated with the AHP role and impact of rehabilitation and long-term self management. This is of particular relevance and importance at this current time, early research into the role of AHPs and "long COVID" will prove valuable.

Several priority actions are listed under Goal two "demonstrating impact" within the UK AHP Public Health strategic framework [1]. The two priorities associated with research are; advocate for public health research within the AHP research community and signpost AHPs to relevant funding opportunities to stimulate new contributions to the public health evidence base, and create and promote evidence to support the scaling up of effective AHP-led public health interventions and to support the shift of AHP practice to earlier and preventative interventions, these are priorities also identified in the NHS Long Term Plan [6] and the 2020 Prevention Green Paper [7]. It is expected that the identification of the research priorities through this study will accelerate and focus the AHP public health research agenda, the clarity of research priorities as identified through this study will be important to focus research effort into areas needed at policy and practice level.

The priorities identified in this e-Delphi study will now be considered by the UK wide strategic framework implementation group and will be disseminated through the AHP professional bodies and the Council for AHP Research. It is anticipated that these priorities will support AHPs, academics and students to shape research proposals.

### 4. Conclusion

Several areas of AHP public health research were identified as priority within this modified e-Delphi study, however, a number of priorities refer to the impact of AHP public health activities. The research priorities will be used to progress the AHP public health research agenda through a UK wide AHP public health strategy implementation group and through support and engagement from the AHP professional bodies and arm's length bodies.

### Author statements

Ethical approval was sought from and approved by the Public Health

England Research and Evidence Governance Group (R&D405). No funding was received for this study. There are no conflicts of interest.

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