A Survey of Care Home Interest in Nutritional Intervention Trial Participation as part of the Ageing Gut-Brain Interactions Study

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Aim

Human health can be both positively and negatively affected by the microorganisms living in the gut, collectively known as the gut microbiota.[1] There is increasing evidence that the gut microbiota play a critical role in both health and disease.[1] Diet is a central factor that influences the composition of the gut microbiota, as well as ageing.[2] There is growing scientific evidence that the gut microbiota affects brain function and behaviour[1], via the gut-brain axis, and this may include some of the behaviours that may be seen as challenging or distressing for those with Alzheimer's dementia (AD).

To date there are no available cures for AD[3], but diet represents an important modifiable component that may influence disease progression via the gut-brain axis. As part of the Ageing Gut-Brain Study – a pilot project investigating the composition of gut microbiota in AD, the feasibility of performing a future nutritional intervention study in the care home setting was assessed.

Methods

As part of the Ageing-GB study, a survey on 'Willingness to Participate in a Clinical Trial of Nutritional Intervention' gained ethical approval. A web-based survey was created using Survey Monkey. The survey link was distributed via email to all Scottish care homes known to the 'Neuroprogressive and Dementia Network', and remained open for a month in June 2018. Results were analysed using Microsoft Excel.

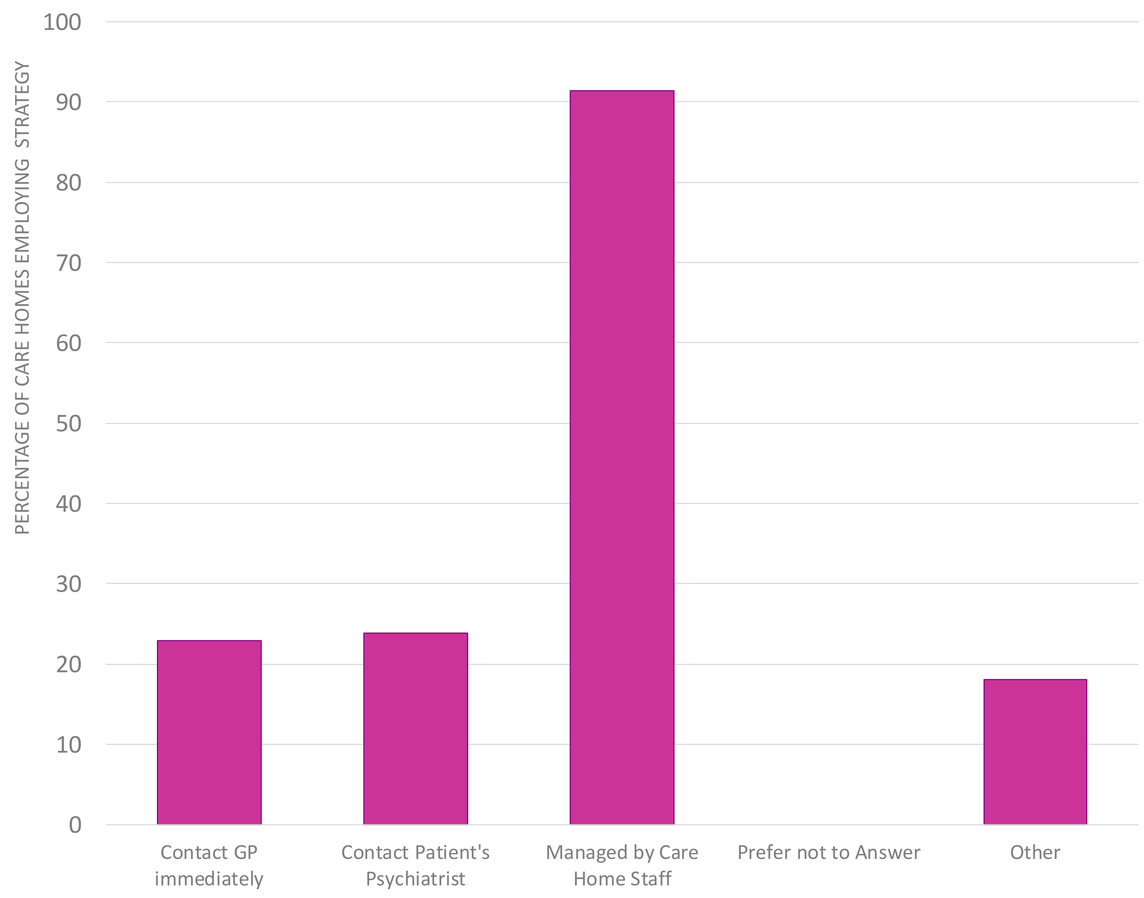

Figure 1 *Initial response by care home staff to a resident displaying challenging behaviour (respondents could select all that apply therefore combined totals exceed 100%)*

Results

There were 105 responses representing approximately 95% of Scottish postcode areas, with 81% of respondents completing the full survey and 83% of responses were from care home managers. The median percentage (IQR) of care home residents with any type of dementia was 70.2% (51.3-84.7), and the median percentage (IQR) of those with dementia with challenging behaviours was 34.8% (17.4-50.0). The usual immediate steps taken by care home staff to residents exhibiting challenging behaviour are shown in Figure 1. Challenging behaviours are recorded on ABC (antecedent, behaviour, consequences) charts in 80% of care homes. Care home staff were positive about researchers approaching their care home to do research using a dietary intervention in those with challenging behaviours with 62% of those responding ≥80% likely to say yes to the study being conducted. More than 90% of care homes stated that they would require staff time involved and staff training requirement prior to commitment to become a study site.

Conclusion

Care homes have great potential for hosting research into dietary components affecting AD progression. While most respondents showed a high level of support for research conducted in their care homes, researchers will need to design studies with the high demands on care home staff time in mind.

References

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