Background

Why should this be investigated?
- 1 in 5 adults living within the UK are vitamin D deficient.1
- Recommendations within this publication also state that “Healthcare professionals should assist with the uptake, promotion, and education of vitamin D supplementation amongst the population, especially within groups at risk”.2
- From this, East Lancashire Medicines Management Board (ELMMB) produced guidelines for the diagnosis and management of vitamin D deficiency in adults on 12th October 2016, with the latest revised version on 8th May 2018.

Risk factors for Vitamin D deficiency included within NICE guidelines:
- Skin pigmentation.
- Use of concealing clothing.
- Institutionalisation/housebound status.
- Pregnancy or lactation status.

Why East Lancashire?
- The increased northern latitudinal positioning of East Lancashire increases inhabitants’ risk of vitamin D deficiency.2

Sources of Vitamin D:
- Consumption of oily fish, egg yolks, mushrooms, or fortified products.
- >90% produced via skin photosynthesis, following exposure to solar ultraviolet B (UVB) radiation.2

From October until April, the latitudinal positioning of the UK does not permit sufficient UVB exposure for optimal cutaneous synthesis.

Research aims and objectives:
- Increase contact between health care professionals.
- Evaluate GPs awareness, knowledge and current practice upon vitamin D.
- Identify missing gaps in awareness and assess barriers.
- To alleviate barriers to supplementation.
- To provide advice on vitamin D.
- To inform practice in improving institutionalised and housebound individuals.
- To condense local guidelines and improve resources.

Methods

Research Design
- Cross-sectional questionnaire conducted during July - August 2018.
- Involved questions about practitioner demographics, current knowledge, attitudes, and practices on vitamin D, and supplementation.
- Eligible participants were practising in East Lancashire CCG, & Blackburn with Darwen CCG.
- Approval granted by: STEMH Research Ethics Committee, UCLan.

Data Collection:
- Via SurveyMonkey Inc.
- Link sent to eligible respondents via email, and via WhatsApp Inc.

Statistical Analysis:
- IBM SPSS Statistics 24 Software used to conduct descriptive frequency analysis, chi-square tests of independence. Simple content analysis was also used.

Key Findings:
- GPs within East Lancashire regularly consult patients at high risk of vitamin D deficiency.
- Local guidelines are seen as the most important source of information on vitamin D, particularly among established GPs (>5 years qualified).
- The publication of local guidelines significantly improves GP confidence on vitamin D and seems to improve impacts GP knowledge and awareness.
- GPs awareness and knowledge of vitamin D has increased compared to studies predicting the publication of NICE guidelines in November 2014.
- The main barrier to supplementation advice for GPs remains time pressures, similar to studies prior to NICE guideline publication.

Implications for research and/or clinical practice:
- Qualitative research among GPs should be conducted to gain an increased understanding of the mentioned barriers. Further research is needed to understand at what point other health professionals offer advice on supplementation, and who is best placed to offer this advice.
- Research methods should be developed and implemented to determine differences in the influence on GPs of local guidelines compared to NICE guidelines.
- Feedback suggests local guidelines require simplification to ensure quick interpretation, and reduce time pressure. Analysis of research into interventions that may help with this, or alternative methods such as media campaigns and patient promotion, may be beneficial in shaping future guidelines.

Conclusions

References