Vitamin D supplementation and COVID-19 – a health promotion survey for the London Met community

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Abstract:

There is growing evidence that individuals with vitamin D deficiency, particularly certain ethnic groups may experience increased severity of COVID-19 complications. Vitamin D insufficiency has been recognised as a concern by the Scientific Advisory Committee on Nutrition and has led to the recommendation of supplementation of Vitamin D for the whole population primarily to maintain musculoskeletal health. More recently, there have been calls by politicians to distribute free Vitamin D supplementation to populations at most risk of contracting COVID-19 and furthermore all residents in care homes were provided with free supplements by the government during the winter months in 2020.

A review of the literature on supplementation uptake of vitamin D within populations in the UK have shown to be below 50% with many finding participants being unaware of the benefits of supplementation. We proposed to launch a health promotion survey on vitamin D supplementation targeting the at-risk London Met population to explore current knowledge, perceptions and perceived barriers to supplementation. This was followed with an educational video on the benefits of

Vitamin D supplementation.

The survey questions were compiled after reviewing the literature and piloted before being distributed online across different platforms accessible to the London Met staff and student community. To date, 79 participants have completed the survey (staff n=14, student n=65). Sixty six percent of participants reported taking a vitamin D supplement, either because they thought they were deficient in vitamin D (56%) or were advised by a healthcare professional (44%). Of the 34% that did not supplement, the most common reasons cited were not needing a supplement and being unaware it was an option without deficiency.

The uptake of supplementation was higher in the London Met community than reported in the literature, although this could be related to the knowledge accrued on the science courses. Some participants (41%) attributed their uptake of vitamin D supplementation to a proposed link between vitamin D and COVID-19 risk. Encouragingly, however, there was a cautious approach to the interpretation of the literature, one observation being that ‘immune health is complex’.

The feedback survey was completed by 30 participants and in total 24% (n=7) had confirmed that they had made behavioural changes following the viewing of the educational video, which included initiating vitamin D supplementation (n=2), improving dietary intake (n=1) and making lifestyle behavioural changes (n=3). These preliminary findings suggest that educational videos could potentially be a good medium for health education.

The next phase of the study will be to provide free vitamin D supplementation to eligible participants to assess changes in serum 25(OH)D.