

Agricultural exposure for healthcare professionals fosters holistic, sustainable healthcare: Before-after survey findings from a pilot programme

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Introduction

- The climate crisis, emerging epidemics, and ageing populations are dramatically increasing global healthcare burdens.
- To cope with these increasing burdens, healthcare systems require sustainable reform, by implementing lifestyle medicine downstream alongside nutritional prevention upstream.
- Healthcare professionals (HCPs), given their ubiquity and respected status, offer an effective platform to foster this paradigm shift.
- Yet, currently medical training does not equip HCPs with such competencies, and there are limited programmes that invest in sustainable healthcare reform.

Pilot programme objectives

- To highlight benefits of lifestyle medicine and connecting with nature.
- To gather participants' current perceptions on the role of HCPs in promoting nutrition and sustainability.
- To raise awareness of sustainable practices and food production.
- To equip HCPs with knowledge on how to achieve nutritious, sustainable diets.

Methodology

- An agriculture-oriented pilot workshop: 2-days, targeted at HCPs. Modified for virtual delivery due to COVID-19.
- Conducted online surveys before and after the pilot to assess workshop impact on knowledge, abilities, and perceptions (KAP) of nutrition, lifestyle medicine, and sustainability.
- Measured survey responses using Likert scales, quantified from 1 to 5.
- Calculated mean scores, 95% confidence intervals, and the change in mean scores before and after workshop. Performed two-tailed t-tests at 95% confidence interval.
- Qualitative comments complemented statistical findings.

Sample characteristics

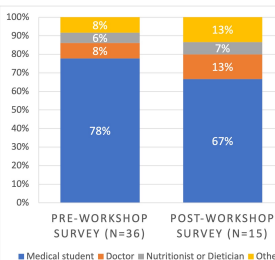


Figure 1a Professional composition of participants

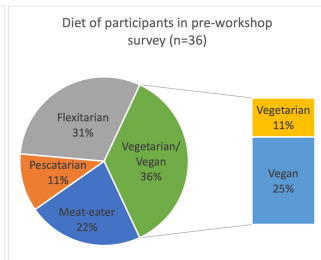


Figure 1b Diets adopted by participants of the pre-workshop survey

Survey Results

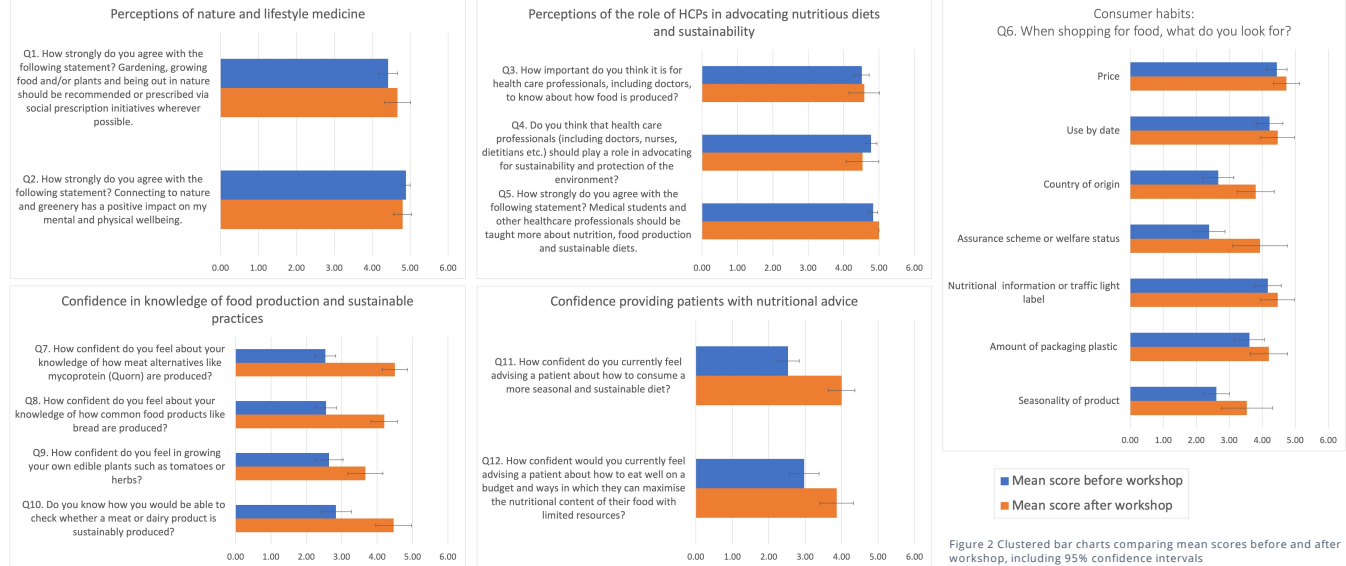


Figure 2 Clustered bar charts comparing mean scores before and after workshop, including 95% confidence intervals

Key findings

- Before the workshop:**
- Participants had positive perceptions of nature and lifestyle medicine.
 - Participants felt it was important for HCPs to advocate for sustainability and optimal nutrition.
 - Participants' knowledge and confidence on such topics were weak.
- After the workshop:**
- Participants' perceptions that were initially positive remained positive.
 - Participants became significantly more confident in both their knowledge of food production and sustainable practices, and their ability to advise patients on nutritious, sustainable diets.
 - As consumers, participants gained awareness on a product's nutritional composition and environmental footprint.

Interpretation

- Limitations include the small sample size, large loss-to-follow-up, the workshop's low emphasis on environmental conservation behaviours, and a sampling bias towards health-conscious volunteers.
- Despite the sampling bias, participants still had clear gaps in their knowledge, reinforcing how these topics are greatly overlooked in current medical training.
- Interactive activities were deemed an enjoyable way for HCPs to build practical skills, allowing HCPs to implement these skills into daily clinical practice and also lead the public by example.
- Participants expressed their desire for in-person engagement and knowledge on more patient-specific recommendations.

Conclusions

- Even with virtual delivery, the workshop successfully increased participants' confidence and knowledge without detracting from existing KAP → This programme is an effective solution to improve HCPs' engagement with nutrition, lifestyle medicine, sustainability, and nature.
- Incorporating lifestyle practices into clinical medicine empowers patients and practitioners.
- With a bottom-up approach, this initiative has the potential to enforce widespread behavioural change and sustainably reform healthcare and food systems.

Key messages and future directions

- We urgently need programmes that facilitate the sustainable reformation of healthcare systems, especially those targeted at training HCPs.
- Positive findings from this pilot workshop support the continued refinement of this training programme.
- Scaling up this workshop across different settings will increase coverage and help validate this programme's effectiveness and generalisability.
- We need to continue raising awareness of lifestyle medicine to propel the movement towards sustainable healthcare reform.

Key References

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