INTRODUCTION

Dietary and herbal supplement education is not required in US medical school curricula, per standard 7 of the Liaison Committee on Medical Education.1 This is concerning, as 38% of US adults use supplements and 72% do not report use to healthcare providers.2 In this study, surveys amongst 41% of Colorado family medicine (FM) residents3 assessed perceptions on adequacy of medical school education on supplements, opinions about efficacy and safety, and behaviors related to discussion of supplements with patients.

*78 FM residents were surveyed across 7 of 9 programs in a population of 192 total FM residents in Colorado.4

OBJECTIVES

Assess need to expand medical education on supplements and effectiveness of curricular intervention in eliciting behavioral change.

METHODS

FM residents participated in an hour-long curriculum covering basic concepts about supplements. Residents completed pre and post surveys. A pilot assessment at University of Colorado Hospital (UCH) FMR informed the final curriculum and survey tool.

RESULTS

Pilot results showed 38% of UCH residents recalled no education on supplements and 77% reported rarely asking patients about supplement use. Results provided sufficient evidence to implement a curriculum at other FMRs.

Pooled data on resident perceptions of adequacy of education (Figure 1 below) showed a majority (88%) of FM residents think they should have received more education than they were provided.

RESULTS continued...

Comparing the education residents received with their opinions about whether herbal and dietary supplement education should be a required component of medical school curriculum revealed findings shown in Figure 2: while 73% think lecture(s) should be required, a significantly smaller proportion, 46%, actually received required lecture(s) in medical school (p<0.005).

A pre/post survey comparison revealed that, even a short, one hour curriculum altered resident opinions about herbs and supplements and elicited planned behavioral change.

Curricular Content: The curricular content eliciting these changes included information on:
- Using reliable resources: the Natural Medicines Comprehensive Database5
- Adverse rxs: prescription drugs vs. herbs/dietary supplements6
- Independent verification (USP, NSF, CL, GMP)
- Examples of benefits & harms: Glucosamine/Chondroitin,8 Kava1

Pre/Post Changes in Behavior & Opinion

Curricular intervention significantly increased the proportion of residents planning to discuss herbs & supplements with patients: prior to the curriculum, only 45% discussed or screened their patient’s supplements yet 89% planned to discuss or screen patient’s supplements following the curriculum (p<0.05, Figure 3).

After the curriculum, residents also expressed greater intention to ask patients about supplement use (frequency increased from “sometimes” to “often” p<0.05, Figure 4).

Once provided with information about supplement risks, benefits and safer ways to research and use them, residents were more likely to recommend supplements to patients (frequency increased from “rarely” to “sometimes” p<0.05, Figure 5), considered physician-guided use of supplements efficacious in some circumstances (p<0.05, Figure 6) and were aware that supplements have statistically caused fewer adverse reactions than pharmaceuticals9 (p<0.05, Figure 7).

CONCLUSIONS

Although education on herbal and dietary supplements is not required by LCME standards,2 results of this study suggest that it should be. An astounding 88% of Colorado FM residents think they should have received more education on this topic than they were provided and significantly more residents think such curricula should be required in medical school (73%) than the proportion of residents who actually received such curricula in a required setting (46%, p<0.05).

Stud results show that even minor curricular intervention can elicit significant change in residents’ opinions and plans for future interactions with patients. Our one-hour supplement curriculum increased the number of residents planning to discuss or screen patient’s supplements from 45% to 89% (p<0.05). The frequency residents intend to ask patients about supplement use from “sometimes” to “often” (p<0.05) and improved resident perceptions on the efficacy of some supplements when used with physician guidance (p<0.05).

IMPLICATIONS

This study confirmed a profound gap in our current educational system in preparing emerging physicians to discuss herbs and supplements with patients. Data illustrating lack of curricula on integrative medicine, desire amongst residents to receive education, and capability of a curriculum to provoke residents to discuss herbal and dietary supplements with patients suggests that further education is needed and could make an impact on physician behavior and patient care.

REFERENCES

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