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The Need for Nutrition Education Project (NNEdPro) – an educational intervention across UK Medical Schools to lay the foundations for good nutritional care

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Hospital malnutrition in the UK has a prevalence estimate of ~40%⁽¹⁾. Evidence suggests gaps in medical doctors' knowledge and skills in clinical nutrition⁽²⁾. The Council of Europe Alliance, UK, has recommended nutrition education for all medical students. NNEdPro was thus formed as an independent educational research, innovation and advocacy group, incorporated in the Department of Health's Nutrition Action Plan⁽³⁾. NNEdPro aimed to conduct an educational needs analysis and pilot a non-vertical curriculum intervention through an innovatively developed educational package in a national sample of tomorrow's doctors.

An intervention group of 100 senior/clinical medical students from 15 medical schools were recruited. A non-vertical educational package was delivered over 2 d, incorporating interactive lectures, role-play, simulated consultations, small group work and mini-PBL. A spiral learning approach revisited topics in order to build upon consolidated basic concepts. Clinical nutrition knowledge, attitudes and practices (KAP) were assessed before and after intervention, and at 3 months, using a construct-validated questionnaire. Questionnaire items were randomised before and after intervention, to minimise recall bias. A student-reported evaluation of the educational intervention was also conducted and yielded favourable results.

Table 1. Nutrition knowledge, attitudes and practices

	Baseline* (n 98)	Post-intervention* (n 98)	After 3 Months* (n 68)	P-value†
Knowledge	4.10±2.08	4.96±1.75	4.15±2.22	0.0004
Attitude	9.15±0.92	10.84±0.71	9.91±0.91	0.0000
Practice	15.2±2.57	16.97±2.02	16.10±2.38	0.0000
KAP	28.5±3.50	32.77±2.79	30.16±3.46	0.0000

*Values are presented as mean difference ±SD; †P-value is from a one-way repeated measures analysis of variance (ANOVA).

Table 1 above demonstrates the key findings from NNEdPro, whereby a statistically significant change in Knowledge, Attitude and Practices scores were seen immediately after the intervention and this was sustained at 3 months. This project demonstrates the performance of the intervention aimed at improving nutrition education for tomorrow's doctors, and can serve as a model for Doctors and Dietitians to work in an effective interdisciplinary partnership when teaching medical students and health professionals.

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1. BAPEN (2009) Nutrition Screening Survey in the UK in 2008: Hospital Care Homes, and Mental Health Units http://www.bapen.org.uk/pdfs/nsw/nsw_report2008-09.pdf (accessed 29 January 2010).
2. Nightingale JMD & Reeves J (1999) Knowledge about the assessment and management of undernutrition. *Clin Nutr* **18**, 23–27.
3. Department of Health (2007) Nutrition Action Plan. http://www.dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh_079931 (accessed 29 January 2010).