ACCELERATED FIGHT AGAINST MALNUTRITION IN TURKEY
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on behalf of The Turkish Society for Parenteral and Enteral Nutrition (KEPAN)

Rationale-Background
Several studies indicated that the incidence of malnutrition at admission in hospitalized patients in Turkey is 30-40%. The incidence in nursing homes is 38% and even increased to 65-75% in the elderly. These rates in Turkey are similar to those in European countries. KEPAN prepared and started an action plan in relation to “Fight Against Malnutrition” (FAM) campaign which was initiated by ESPEN and endorsed by the European Parliament in 2008. Here we present what has been done by KEPAN to reach the goals and the results of all integrated activities during 2011 - 2013.

Implementation

**ESSEN Blue Book**

As a public awareness activity, a big green apple maquette was shown off in the most crowded street in Istanbul. The Chairman of KEPAN gave a speech on the importance of malnutrition and the ESPEN campaign, including nutritionDay and afterwards the hostesses gave out green apples and informative brochures about malnutrition to the public throughout the day. In addition to this, cloth banners with the “Fight Against Malnutrition” motto were also put up in 23 different locations around the city.

**Resources:**

• The project has been conducted by the KEPAN Executive Committee by the voluntary support of the KEPAN scientific committee.
• KEPAN financed the whole portion of the campaign budget.
• The Medical Nutrition Industry in Turkey gave financial support to KEPAN’s educational activities.

**Results – Outcomes**

• The Ministry of Health and KEPAN have forced each hospital to follow “Guidelines for Safe TPN Administration”.
• Malnutrition assessment (SGA or BMI) was accepted as the indicator for reimbursement of medical nutrition by the Social Security Institution.
• In homecare, nutrition solutions and all other necessary expenses are covered by the government.
• According to the 2006 database, 54% of patients had weight loss before admission. In 2011 and 2012 those data were 48% and 39.4%, respectively.
• The execution of clinical nutrition was quite good in 2012 (39.4% required nutritional intervention, 34.4% received).
• Use of enteral products increased by 90% from 2008 to 2012. Use of oral supplements was 60% of the total enteral consumption in 2008, and increased to 80% in 2012.
• Data of 45 000 patients to NRS-2002 database and 600 patients to MNA-SF database was loaded.
• In 2011, 2133 patients from 96 units and in 2012, 2373 patients from 151 units were recorded in “nutritionDay” activities. In addition, for the first time, 287 patients from four nursing homes were registered to the database.
• The number of KEPAN members increased by 28% in the last two years.
• The percentage of teaching hospitals having nutrition support teams increased to 68.4%.
• The next ACON Course will be held in Turkey in 2014.
• Many medical faculties integrated nutrition lessons into their syllabus. Some of them obliged the residents to have a full-day nutrition course.
• Nutritional screening was adopted nationwide in hospitalized patients and was considered essential in accreditation procedure.

Conclusion

• Awareness about malnutrition has increased considerably among healthcare professionals and the public.
• KEPAN’s collaborations with The Ministry of Health and The Social Security Institution have produced very positive results.
• Today, reimbursement for nutrition is much more widespread.
• All types of printed and electronic informational material regarding malnutrition and nutritional support were produced and introduced into the field.
• A increasing amount of data collected in the NRS-2002 and MNA-SF databases have aided in producing scientific papers.
• We believe that the “Virtual School of Nutrition” is a useful resource for doctors, nutritionists, pharmacists, nurses and students and for healthcare workers seeking answers to their questions on clinical nutrition in daily practice.

Next steps

• To conduct a study investigating the incidence of malnutrition among the healthy population
• To investigate the impact of nutritional support on the national economy
• To produce regulations and guidelines for nutrition in collaboration with The Ministry of Health
• To reinforce the establishment of clinical nutrition as a scientific discipline in medical schools

Activities

• A new, modern, regularly updated and easy to use website has been launched, offering plenty of information and educational material in Turkish and in English, helping the “Fight Against Malnutrition” (www.kepan.org.tr/en).
• A new NRS-2002 database is included in the KEPAN website to collect data from 18-65 year old patients (www.mna-sf.org).
• Another database using MNA-SF tool is also included in KEPAN website to collect data from elderly patients (www.mna-sf.org).
• Full-day “Clinical Nutrition” Symposia were organized at five different cities with 50-75 participants.
• Basic nutrition courses were held during the national congresses organized by the Turkish Neurological Society, Turkish Society of Medical Oncology, Turkish Dietetic Association, Turkish Association of the Public Hospital Pharmacists.
• Seven “Advanced Nutrition School” were organized for these specialties: Geriatrics Radiation Oncology Neurology Dietitians
• 33 ESPEN LLL Live Courses were organized within two years. Organization of the first and 500th live courses in different cities with 50-75 participants.
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