

## Oral Presentations

### 10C3OP1803

#### Informing Relatives about Their Diabetes Risk - More Good than Harm

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**Aim:** First degree relatives of non-insulin dependent (NIDDM) diabetic patients are at increased risk for the disease; this study was planned to measure the existing knowledge of the attitudes to NIDDM in people with one NIDDM parent and the effectiveness of an educational intervention.

**Method:** of 152 non-diabetic adults with one diabetic parent, 105 agreed to enter a randomised trial of a planned educational intervention compared with a 'neutral' interview or with no contact. The study was completed by 95 subjects.

**Results:** Following intervention, changes from (similar) baseline measures of knowledge of early diagnostic symptoms and of the consequences of NIDDM were greater in the intervention than the control groups when remeasured 23 weeks later ( $p < .005$  and  $.001$  respectively). The intervention group also knew more about risk factors for NIDDM ( $p < .001$ ), were better able to suggest ways to reduce their own risk ( $p < .03$ ) and had actually significantly changed their diet ( $p < .05$ ). Groups did not differ significantly in changes in anxiety/depression scores or formal measures of positive well-being. The effects of the intervention on locus of control for health, obesity, smoking and diabetes were also measured and results will be presented.

**Conclusions:** High risk relatives can be made more aware of the risk, early symptoms and consequences of NIDDM and of possible preventive strategies. Dietary practices may be changed, at least for a time. No psychological costs of intervention were demonstrated. Education for relatives is a possible tool in the prevention of NIDDM.

### 10C3OP1804

#### Education Needs of Diabetic Patients with Low Socio-economic and Literacy Levels

Madhu, S.V., and Lalitha, K., India.

Diabetics (32 males and 68 females) undergoing treatment at different hospitals in Delhi were interviewed to define specific education needs in the planning of standardized education programmes for them. Patients' knowledge was graded as v.poor, poor, fair, good or v.good. The diabetics were aged 21-80 yrs and belonged to low (57%) and middle (43%) socio-economic groups with a low literacy profile (38% illiterate; 70% < 8th standard). The patients spoke different languages and acquired knowledge of diabetes primarily from their physicians (88%).

Overall diabetes awareness (ODA) for the group was poor (mean score 34%) while their knowledge of self-monitoring was very poor (23.7%). Only 10, 11 and 16% of patients could be graded as good or v.good for their knowledge of ODA, "Self-monitoring" and "disease process" respectively. ODA co-related with socio-economic status and education level but not with age and duration of diabetes. However, knowledge of "Complications" and "self-monitoring" improved with increasing duration of diabetes. Patients were not aware of food exchange (89%), glucometer (88%) and benefits of exercise (81%). Females had uniformly lower scores than males for all aspects of diabetes studied. Over two thirds of females scored poor or v.poor ODA scores and only 7.4% achieved good or v.good scores. This particularly low awareness of diabetes among women appears to be due to their socially underprivileged status.

These results not only highlight the inadequacy of existing diabetes education methods but also point to the difficulties in educating low socio-economic, low-literacy, and multi-lingual patient groups particularly women. Alternate patient education strategies using inter-person communication methods tailored to the learning abilities and perceptions of different socio-cultural and ethnic groups may be more appropriate.

### 10C3OP1805

#### Social Problems Encountered by Young Japanese IDDM Patients.

Yagura, T., Nishino, M., Higami, Y., Okano, T., and Okamoto, S., Japan.

We investigated social problems encountered by young Japanese IDDM patients (pts). Thirty-three questionnaires (73%) were recovered from 45 pts in Nara Prefecture whose IDDM has occurred before 18 years-old.

**(Results)** Nineteen pts entered to colleges, indicating a higher rate than in general population. Substantial discrimination due to diabetes (DM) was not observed with regard to college entrance so far as in this study. Twelve of 21 pts who got occupation in companies concealed their DM in order to avoid disadvantageous judgement at adoption interview and 7 pts still do not announce their DM and are experiencing many difficulties to balance between DM control and their occupational duties including social activities. Four among seven 25-34 years-old pts were married in a good relationship with their spouses. But many single patients are worried whether they can get spouses and some experienced break of love because of diabetes. The amount not covered by insurance was about a hundred dollars a month. Two thirds of the pts wanted governmental supports for medical costs and exemption of the premium on the welfare pension insurance.

**(Conclusion)** Young Japanese IDDM pts encounter social difficulties as more as they grow up. Economical supports and correct understanding of the disease by the community are necessitated for their total well-being.

### 10C3OP1806

#### Educating Ambulatory Diabetes Care Professionals in Bulgaria

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We carried out the first educational course for ambulatory diabetes care professionals with the aim to assess the existing level of knowledge on diabetes among them, to design and implement a teaching program matching the needs assessed and to evaluate the efficiency of the education delivered. 30 medical doctors and 16 nurses were selected to participate. The initial level knowledge was assessed by a 21-item anonymous pretest questionnaire including single- and multiple-choice questions as well as open-ended items. The questionnaire covered the most common and frequently used pieces of knowledge and practical skills in ambulatory diabetes care. The analysis of the pretest questionnaire allowed us to develop a 5-days educational curriculum matching the needs disclosed. On the completion of the course, a 17-item posttest questionnaire was administered, including more specific questions on matters which had been taught during the training.

The results of the pretest show that, in the average, the percent of correct answers is 60.3% for the doctors and 50.5% for the nurses. Major areas, where lack of knowledge was found, were intensive insulin therapy, insulin injection techniques and diabetic diet. These results confirm the relatively large prevalence of errors on practical issues which are of vital relevance to diabetes management. In addition to the large number of errors, most of the answers to the multiple-choice questions were incomplete, which was an indication that information and knowledge were spread in a non uniform manner. The results of the posttest were significantly improved as the percent ratio of correct answers was 73.5% for the doctors and 70.8% for the nurses although the questions were more specific.

The following conclusions from the assessment and the training course were drawn: (i) the specific conditions in ambulatory diabetes care in Bulgaria require a two-stage educational scheme - the first stage should be a strategy - forming training on the modern principles of diabetes care; the second stage should be assigned to going deeper into more specific problems; (ii) the existing level of knowledge among diabetes care professionals is lower in the areas with more rapidly changing standards, due to the limited financial, information and other resources; and (iii) it is highly recommended that the training was delivered in the native language of the participants as a foreign language or the presence of an interpreter might be a source of confusion.