« DIABETES I AND II, THE PHARMACIST'S INVOLVEMENT »
A TRAINING PROGRAM FOR FRENCH PHARMACISTS IN DIABETES MELLITUS

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CONTEXT AND OBJECTIVES

A national training program for French community pharmacists has been elaborated to improve pharmaceutical care of diabetic patients according to the St Vincent Declaration.

TRAINING PROGRAM

PARTNERS

4 national societies :

- Sanitary and Social Education Committee for French Pharmacy (Cespharm)
- Continuing education association for French Pharmacists (UTIP)
- French Scientific association on Diabetes : ALFEDIAM*
- Diabetes Education Study Group (DESG)

> Conception, expert evaluation, coordination, implementation, logistic

8 pharmaceutical companies involved in diabetes mellitus :

Bayer Classics - Hoechst (AVENTIS Group) – Lifescan
Lilly France - Lipha Santé (MERCK)
Medisense - Novo Nordisk - Roche Diagnostic

> Sponsoring

Location of the training sessions

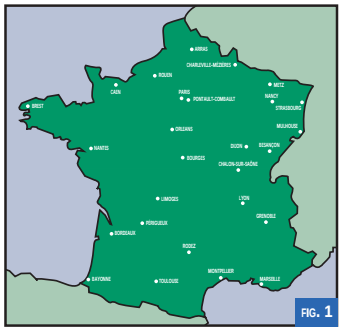

FIG. 1

CONTENT

Each training session (about 4 hours) included :

> 3 interactive workshops about

- prescription delivery
- insulin injection and self monitoring (blood and urine)
- daylife (hypoglycaemia, footcare…).

> A plenary lecture led by a diabetologist describing each level of the pharmacist intervention.

ASSESSMENTS

1200 pharmacists from 27 areas of France have been trained between march 1999 and march 2002 (Fig 1).

SATISFACTION EVALUATION

Participants' satisfaction was evaluated by a questionnaire filled in after each session. A great satisfaction of pharmacists was noted, with a mean mark of 6 out of 7.

KNOWLEDGE EVALUATION

Acquired knowledge was evaluated by filling out the same questionnaire :

- before the beginning of the workshop (pre-test)
- at the end of the session (post-test)
- 3 months after the training session (post-test 3 months).

The questions concerned : generalities, self glucose blood or urine monitoring, insulin injection, foot care, hypoglycaemia, oral antidiabetic drugs (OAD).

PHARMACISTS' ESTIMATION OF THEIR KNOWLEDGE ON DEVICES (FIG. 2)

- Before education, 88% of pharmacists estimated insufficient or very insufficient their knowledge on devices used in diabetes mellitus. They were only 22% after education.
- After education (post-test), 78% of pharmacists estimated sufficient or very sufficient their knowledge on this field (against 13% before the training sessions).

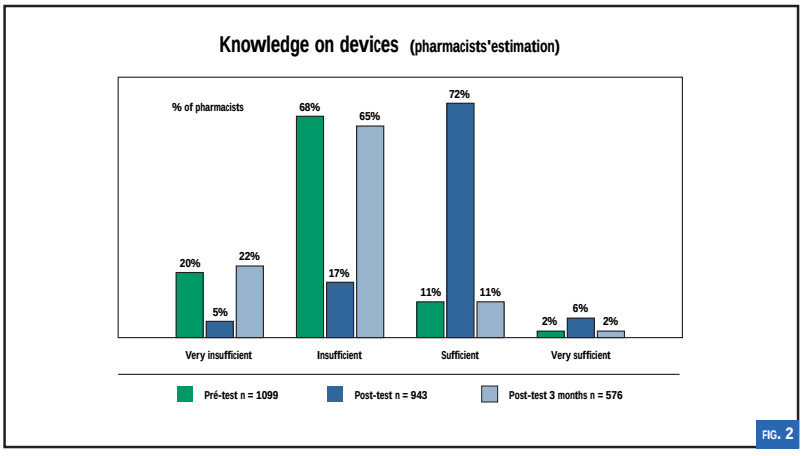

FIG. 2

MEAN MARK OBTAINED BY PHARMACISTS (FIG. 3)

The mean mark out of 20 (number of correct answers) was 14 at the pre-test, 17 at the post-test and at the post-test 3 months [data obtained on the 21 first sessions].

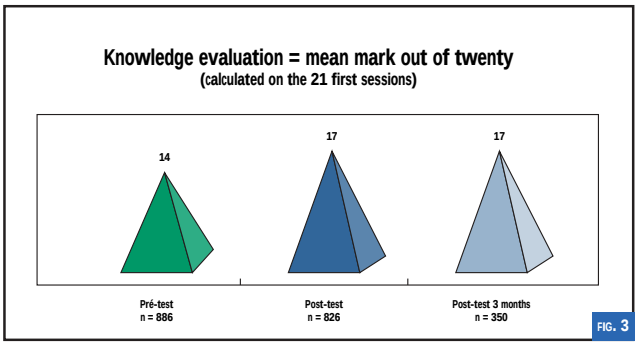

FIG. 3

MAIN RESULTS OF THE EVALUATION

■ The least known topics before education (pre-test) were :

- Self-monitoring of blood glucose for type-2 diabetic patients with OAD (36% of correct answers)
- Advised devices for foot and nail care (respectively 40% and 59% of correct answers)
- Insulin injection devices : syringes (58% of correct answers)
- Association of OAD of the same class (64% of correct answers)
- Urinary strips (65% of correct answers).

→ **A marked improvement of pharmacists' knowledge was observed in these fields after the training sessions. The level of this knowledge was often maintained within 3 months (Fig. 4) :**

- Self-monitoring of blood glucose for type-2 diabetic patients with OAD : 63% (post-test) and 69% (post-test 3 months) of correct answers.
- Advised devices for foot and nail care : respectively 57% and 86% (post-test) and 61% and 86% (post-test 3 months) of correct answers.
- Insulin injection devices (syringes) : 72% (post-test) and 59% (post-test 3 months) of correct answers.
- Association of OAD of the same class : 91% (post-test) and 90% (post-test 3 months) of correct answers.
- Urinary strips : 84% (post-test) and 86% (post-test 3 months) of correct answers.

■ The best known topics before education (% of correct answers > 80%) were :

- Self-monitoring of blood glucose for insulino-dependent diabetic patients with 3 injections/day
- Blood glucose monitoring devices
- Behaviour in case of hypoglycaemia
- Insulin injection devices : pen

→ **In all these fields, the percentage of correct answers reached at least 90% after the training sessions and was maintained within the three following months.**

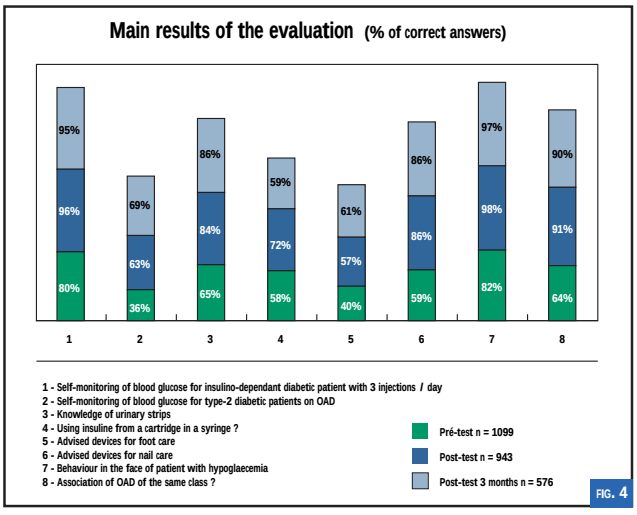

FIG. 4

CONCLUSION

This training program has been elaborated within the framework of a partnership between institutional organisations and pharmaceutical companies all involved in diabetes mellitus. The evaluation data highlight the great satisfaction of pharmacists, the immediate and important benefits of this program on their acquired knowledge and the maintenance of the level of this knowledge within 3 months. Such a training program should contribute to the quality of pharmaceutical care of diabetic patients.

** Association de Langue Française pour l'Etude du DIAbète et des maladies Métaboliques*