

**THE COST-EFFECTIVENESS OF A PROPHYLACTIC
MIGRAINE PROGRAM AS CONTRASTED TO
PHARMACOLOGICAL MIGRAINE TREATMENT**

Presented by

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Poster Session

**The Tenth Congress of the International Headache Society
New York City, NY**

June 29-July 2, 2001

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Objective:

To compare the cost-effectiveness of utilizing a non-traditional, prophylactic migraine program with traditional, pharmacological migraine treatment for clients in a managed care practice in Northern California using a retrospective analysis of a convenience sample.

Background:

Migraines inflict 22 to 24 million Americans, usually women, between the ages 10 to 40. The Mundo Method Program, a self-care educational program uses behavioral treatment, emphasizing body-mind awareness, elimination of headache triggers and stress reduction to prevent headaches. Mundo Method therapy uses non-instrumental biofeedback technique for headache relief.

Methods:

Cost-effectiveness Analysis: assumed the benefits of a given treatment and allowed the inclusion of effectiveness indicators that dealt with cost and quality of life.

Non-traditional (Mundo) Group: A retrospective analysis (1995-1999) of program questionnaires, baseline and follow-up, (n=78) of clients who self-assessed their headaches as migraines according to IHS criteria. A group format was employed where clients attended sessions of 5 or 6 weeks. Number of headaches reported before and after program, use of abortive and prophylactic medications, and the use of the Mundo therapy were collected and analyzed. 87 % of the clients were women, age range 17 to 62 with a median of 19 headache years. Three managed care providers sponsored the sessions sharing the cost with the clients via a co-payment arrangement. Encounter data for this group was not available to link cost of prior maintenance treatment.

Traditional Group: Health plan members using abortive migraine medications over one year (September/1999 to September/2000) were compiled from pharmacy data. Encounter data from office visits, specialist referrals, emergency care, and procedures were cross-matched with the pharmacy database. The ten members with the highest migraine treatment and pharmacy costs were selected. Other prophylactic medication and treatment information was not available. A cost-effectiveness analysis was used to compare the information provided by the data from the two groups. The mean cost of abortive medications and office visits for migraines was \$2187/year/member.

Results:

Analysis of the 78 cases in the Mundo Program showed a 41% reduction in the number of headaches and 52% decreased use of abortive medication. Of note prior to the program most were not on prophylactic drug treatment. Although some clients did not realize a reduction in the number of headaches, they described a reduction in the length and intensity of headache. 97 % reported greater self-control and understanding of their headache pattern. The mean cost of treating the Traditional Group was associated with direct migraine treatment (\$2187). Applying the Mundo Program to this group, a projected reduction of 41% in the number of headaches was anticipated resulting in an estimated cost reduction of \$896 per member. Cost for a six-week, Non-traditional Program was estimated at \$1500 per group of ten clients. Deducting the \$50 per member co-pay, this resulted in a \$1000 cost to the managed care organization. Net savings for the ten members would be approximately \$8000/year.

Conclusion:

Cost reduction is noted in the decreased cost/client/year as evidenced by a decreased use of abortive and acute therapy and increased self-control. Subjects in the Non-traditional Program shared general remarks in the survey comments related to increased quality of life with decreased migraine occurrence. A qualitative study of the program's effect on quality of life issues in the treatment of migraines is recommended. The findings that biofeedback, stress reduction, relaxation and trigger avoidance reduce frequency of headaches is consistent with the literature. A prospective study using a pretest/posttest design identifying encounter costs, prophylactic contrasted with pharmacological, is recommended.

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