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"Health Passport" **A Health-Maintenance Program** **for the Elderly in the Community:** **Evaluation Study**

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RESEARCH REPORT

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Related Myers-JDC-Brookdale Institute Publications

Bentur, N.; King, Y.; and Chekhmir, S. *An Evaluation Study of an Intervention Program to Promote the Health and Quality of Life of Residents of an Old Age Home through Proper Nutrition and Physical Exercise*, RR-488-07 (Hebrew).

Bentur, N.; Chekhmir, S. *Screening for Hearing and Vision Problems: An Evaluation Study*, RR-409-03 (Hebrew).

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Executive Summary

1. Introduction

There is today a consensus among health policymakers and service providers in Israel and abroad that if individuals are not actively involved in maintaining their health and if medical professionals do not act to prevent illness and promote early detection of health and functional disorders, it will be impossible to ensure that the population remains healthy in the future. This is particularly important for elderly people, whose state of health and physical, cognitive, and mental functioning are liable to deteriorate as they grow older. This consensus prompted ESHEL and Maccabi Healthcare Services to initiate an experimental program to enhance the proactive involvement of elders living in the community and of their family physicians in maintaining their health and to increase their knowledge and awareness of the subject. The program was unique in that elders came for regular, scheduled check-ups with their family physicians, rather than visiting them only when they had an acute medical problem. The experimental program focused on the following areas: flu inoculation; regular vision and hearing tests and referral for treatment as necessary; testing for hypertension and treatment if required; nutrition evaluation and referral for dietary counseling as necessary; guidance and encouragement to engage in physical activity; and follow-up of falls and guidance to prevent recurrences.

Elders in the program were given a "health passport" (whence the name of the program) in which information updates about test results, events, changes in health, and types of activity were recorded. A social worker from the health plan was given responsibility for implementing and monitoring the program. She was involved in all the details and stages of the program, maintained regular, close ties with the participating physicians, involved the medical staff in the program, including nurses, physiotherapists and occupational therapists at the clinics and devoted much of her time to instructing and assisting the elderly participating in the program. Apart from regular check-ups for the elders with their family physicians, the program's activities included lectures on relevant subjects, free physical exercise groups, check-ups for early identification of vision and hearing disorders performed by specially trained volunteers, and participation in discussion groups with the program coordinator to enhance their sense of personal responsibility for their health. The physicians participating in the program also attended lectures on relevant subjects and received instructive documentation.

The program was evaluated by a study aimed at examining its development and implementation, learning about its successes and obstacles, and providing feedback to Maccabi and ESHEL. It also endeavored to examine the program's contribution to the involvement and activities of family physicians and to the elders who took part.

2. Study Design

The program was monitored prospectively by means of a quasi-experimental process of the "before and after" type, with an experimental group and two control groups, with no random allocation. All the elderly in the study were examined twice – once prior to the experimental

program and once two years later. The study population included approximately 400 elderly people. Of these, some 200 were registered with 18 family physicians (hereinafter, the experimental group); a group of approximately 100 did not participate in the program but were registered with the same 18 physicians (hereinafter, the experimental clinics control group); around 90 who did not participate in the program and were registered at two non-participating clinics (the other clinics control group). The experimental and the control clinics as well as the 18 participating physicians were selected by Maccabi management. The elderly were sampled randomly, in each of the three study groups. All the elderly in the program and in the study are independently mobile and capable of reaching their family physician by themselves.

The data were collected in two telephone interviews with the elders using a closed structured questionnaire, the first before the program started and the second one, two years later and through six focus groups of participating family physicians, which were conducted six months, a year, and two-and-a-half years after the program began.

3. Findings

a. Program's Contribution to the Elders

The average age

of all the elderly in the study (in all three groups) was 74; 43% were men; 57% were married; 37% lived alone. All functioned normally at the start of the program, but they reported a deterioration in their condition during the subsequent two years.

An examination of the changes in health-promoting behaviors revealed a significant increase in the percentage of elderly who had their vision tested in the experimental group and in the experimental clinic control group. The percentage of elderly who had their vision tested increased in the experimental group from 63% before the program to 79% after it and in the experimental clinic control group from 55% to 71%. There was no change in the other clinic control group. There was also an increase in the percentage of elderly who received hearing tests in the experimental group – from 19% before the program, to 49% after it. The percent of elderly in the experimental group who received a hearing test after the program was more than double the rate in the two control groups (49%, 22% and 21% respectively). Note, however, that even after the program only half of the elderly who participated received hearing tests. In all three groups, the percentage of elderly people who received a flu shot during the year preceding the interview increase, but the increase was statistically significant only in the experimental group (from 76% to 81%). However, the percent of elderly who reported engaging in physical activity declined somewhat after the program, both in the experimental group and in the experimental clinic control group. A possible reason for this may be that some of the elderly may have acquired a better understanding of what constitutes physical exercise. Before the program, many of them believed that they engaged in physical exercise; however, once they understood what was required of them (at least half-an-hour, three times a week), they reported that they were not engaging in exercise. This theory is supported by the fact that the percentage of those reporting that they engaged in physical exercise in the other clinics control group hardly changed.

An examination of changes in attitudes among the elderly about the role of the family physician in maintaining their health revealed a decline in the percentage of those who believed their physicians to be responsible for their health among those in the experimental group. No increase was observed in the two control groups. This finding could indicate that the elderly had developed an increased sense of responsibility for their condition and shows that the program had indeed empowered them.

b. Program's Contribution to the Physicians

Most of the physicians who participated in the program had a positive opinion of it and many noted its benefits while at the same time suggesting changes. They said that the program has improved their attitude to early detection and maintaining the health of the elderly. They had absorbed the spirit of the program and some of the elements had become "part of their jargon" and been assimilated into their practice and worldview. However, apparently only a few of them had internalized the full set of components and were continuing to implement them after the experimental period. Some believed that in the future it would be worth focusing the program on issues that they were less aware of, such as fall prevention, nutrition, physical exercise, and vision and hearing checks, rather than issues that they were already well aware of, such as inoculations and blood pressure monitoring.

Many of the physicians reported that the "division of responsibility" between themselves and the elderly had increased their involvement in maintaining the health of the elders because "we now feel we have a partner." Moreover, some reported that their involvement in the program had increased their interest and commitment not only to those participating in the program, but also to other elderly patients who had not participated. They reported that the program had made them feel the need to ask questions about their health behavior patterns and "naturally" to wish to do so. This is important from an economic angle, because one of the program's main goals is to instill its principles into the ongoing work of the physicians without large-scale investment in the future.

One of the important contributions made by the program, the physicians claim, was that it gave them the opportunity to work as a team and cooperate with other professionals at the clinic, particularly the nurses, physical therapists, and occupational therapists. They also noted that they saw possibilities in expanding this cooperation to future prevention and health promotion activities. Furthermore, the physicians noted that the program coordinator made an enormous contribution to its success and said that the role was an important element in ensuring the day-to-day implementation. Only a few physicians said that they had utilized program tools such as leaflets and information booklets for the elderly.

The program's positive effect on the family physicians was also reported by the elderly. For example, the percentage of elderly reporting that their physician had asked whether their hearing had been tested rose in both the experimental group and the experimental clinics control group – from 4% before the program to 22% after it. In the experimental group, the percentage of elderly

who reported that their physician had spoken to them about the importance of physical exercise increased from 27% to 38%. However, even after the program, a quarter to a third of the elderly reported that the doctor asked them about prevention and health promotion activities. It is, of course, possible that the doctor also discussed this with others who did not remember it or did not report it. If this is the case, it seems that these people did not register the conversation and did not take any action as a result. In addition, in the experimental and experimental clinics control groups, there was an increase in the percentage of those reporting that their physician had asked them whether they had fallen recently and discussed ways to prevent falling, while there was no change in the other clinics control group. However, here too, even after participation in the program, only a tenth of the elderly reported that their physician had asked about prevention of falls. This indicates that although the program benefits the physician, its effect is only partial, and additional activity among physicians is required.

An examination of the use of the health passport itself revealed it had been little utilized. Although it was one of the innovative components of the program, many of the physicians said that, at first, the passport had "encouraged participants to think about subjects included in the program," but that it had gradually been discarded and many of the physicians and the elderly had not remembered to update it. Two years after the implementation of the program, only 60% of the elderly participants still had their passports and little had been recorded in them; most of the information dated from the time they joined the program. Information regarding certain elements, such as nutrition had been recorded in only a fifth of the passports.

4. Conclusion and Possible Future Directions

The experimental program was implemented for three years. Its goal was to augment involvement of family physicians and elderly people in health maintenance. The study shows that the program contributed to an improvement in the health-maintenance patterns among the elderly and considerably helped improve family physicians' behavior in this regard. Despite this progress, the findings indicate that a considerable percentage of elderly and doctors have not yet fully taken on the goals of the program, and that additional activities are required in order to raise the percentage of doctors who address all areas of desired health behavior among the elderly, as well as the percentage of elderly who receive preventive tests. In addition, the findings suggest that the change that occurred among physicians was also beneficial to elderly people who were not participating in the program and that there was a change among some of the participating elderly in their willingness to take responsibility for their health and empowerment.

Before a decision can be made regarding the possibility of implementing and disseminating the program elsewhere, costs must be examined. The program administrators in Maccabi and ESHEL believe that it will be necessary to bring down the costs if the program is to be introduced in additional venues and widely disseminated. One possibility that was suggested is to increase the involvement of nurses and paramedical staff, such as physical therapists and occupational therapists, so as to reduce the duties of the program coordinator and to lessen the burden on the physicians by transferring some of their duties to other medical staff. In addition, despite the

complexity and difficulty of such a venture, it is worth attempting to examine the long-term epidemiological outcomes of the program, such as changes in the participants' health status, hospitalizations and other indices.

The program made positive changes in Maccabi's activities to promote the health of the elderly in the community and helped increase awareness of the importance of the subject. The study findings were last year presented to the management of Maccabi Healthcare Services and are already being used as the basis for identifying new directions for action and for some of the elements to be adjusted and incorporated in the development of existing activities. The program has also been presented at other health plans and at the Ministry of Health. It has attracted praise and generated much interest. There is evidently much to be learned from the program and the study findings and a considerable proportion of its elements may be implemented.

The study is the result of an initiative and cooperation among research staff at the Myers-JDC-Brookdale Institute, the directors of Maccabi Healthcare Service, and ESHEL.

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