

Psychiatric Collaboration Models in Israel

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ABSTRACT: We present a literature review of collaborative enterprises between psychiatrists and primary care physicians in Israel and other countries. Also described are local psychiatric liaison initiatives in Israel, as well as landmark studies of collaborative psychiatric care. These studies demonstrate the superiority of community psychiatric liaison models in the treatment of patients suffering from depressive anxiety disorders and somatization disorder. In light of the mental health reform process currently underway in Israel, it is important to develop, implement and assess such liaison models.

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The mental health care system in Israel is undergoing a process of reform that will be completed in the near future, whereby psychiatric care is being transferred from the state to the various health management organizations (HMO) in the country. As the need for mental health care increases, financial resources and the availability of psychiatrists for consultation are decreasing in view of the expected shortage of psychiatrists in Israel in the coming years. Hence, it is reasonable to expect a growing dependence of mental health care on primary care physicians (PCPs) and an increased need for their collaboration with psychiatric teams who are presently in the midst of a reorganizational process. However, obstacles to such collaborations between primary care physicians and psychiatrists are anticipated due to the increasing burden of care in primary care due to the aging population, the management of increased demands due to chronic diseases, and the expected shortage of primary care and other subspecialty physicians.

THE LITERATURE

The prevalence rates of mental disorders in patients seeking general health care in primary care clinics in Israel are higher compared to other countries [1]. In that study, patients visiting primary care clinics were screened for mental disorders by questionnaires which also included self-report mental health assessment instruments (including the GHQ8, CIDI-SF, PTSD checklist, and the Symptom checklist-90). More than half of all

clinic patients reported some kind of psychopathology [2]. The prevalence of depression was 19.4%, of recurrent brief depressive disorder (RBD) 11.7%, of anxiety disorders, in particular general anxiety disorder (GAD), 15.5%, and of neuroasthenia 4.3%. All these rates, other than that for GAD, were higher in Israel than those reported in primary care clinics around the world (depression 15.9–16.9%, RBD 3.7–5.7%, GAD 7.9–22.8%, neuroasthenia 0.8%, and hypochondriasis 0.11–2.6%) [3,4].

Another unique finding among patients visiting primary clinics in Israel was the lack of difference between males and females in the prevalence of any mental disorder and particularly of depressive disorders. This is in contrast to the results of community studies in many countries, including Europe and the United States, where females show a 1.5–3 times higher risk of depressive disorder [2]. These data are striking, since in the community the rates were mid-range as compared to other countries [1,2].

There are several possible explanations for the higher rates of mental disorders in patients visiting primary care clinics in Israel compared to community rates across the world: (i) a relatively higher use of primary care services by patients with mental disorders in Israel [5], (ii) lower levels of recovery, as a result of a lower level of detection and treatment in the primary care setting, (iii) preferences of patients with mental disorders to avoid formal psychiatric consultation due to stigmatization [2,5], and (iv) the presence of two separated systems, general health and mental health, until implementation of the reform process presently underway. The health providers, including general practitioners (GPs), were not formally responsible for the treatment of mental disorders, thus their motivation for becoming familiar with those disorders was lacking.

Studies on the efficacy of psychiatric consultation in general practice have explored various models of collaborative care:

- Collaborative care where the psychiatrist provides consultation to patients in the primary care practice, and the psychiatrist is the supervising care manager and advises the family physician (FP)
- Single psychiatric consultations with patients in the primary care practice, in the presence of the FP, and advising the FP and patient through ongoing correspondence
- Collaborative care with the psychiatrist providing consultation to the patient in the primary care practice where the psychiatrist sees patients referred to him/her by the FP without the FP attending the meeting

- Single psychiatric consultations with patients, not in the family practice, with a follow-up letter to the FP.

Psychiatric liaison models are practiced in several primary care clinics throughout Israel. They are either part of a local initiative or constitute an inbuilt organizational liaison working scheme.

PSYCHIATRIC CONSULTATION IN PRIMARY CARE PRACTICE IN ISRAEL

Local initiatives in Israel described in the psychiatric literature have involved primary care clinics with experienced experts in family practice who were also involved in academic activities and resident training. Staff members had some affiliation to mental health activities (such as the Balint group, training in the field of psychology). Staff motivation was evident in initializing and maintaining this working model [6-8].

One such model was a 14 year cooperative enterprise of a primary clinic that was initially based on a personal acquaintance with the consulting psychiatrist and eventually developed into a working scheme that evolved over time. It began as a teaching relationship and developed into case discussions and tripartite consultations with joint interviews. The clinic was situated in Rosh Ha'ayin, a small town in central Israel with a predominantly Yemenite immigrant population that immigrated en masse to Israel in 1949–1950. On immigrating to a Western society, this population experienced dramatic cultural, economic and social challenges. The advantages of this model included increased accessibility to mental health consultation, as well as increased knowledge and psychosocial sensitivity of doctors toward their patients and staff [6].

Another psychiatric liaison model is a primary care clinic in the southern city of Beer Sheva. Psychiatric consultations of 46 patients who were seen by a psychiatrist over the course of 1 year (1995) were analyzed. The primary clinic staff included nine experts in family medicine, one resident in family practice, and two social workers. Psychiatric consultations were held once a month. At each 30 minute consultation, a social worker and the patient's family physician were present. The FP and social worker presented the patient's clinical history and reason for referral. Reasons for referral were mainly confirmation of an already determined diagnosis and decisions regarding medical treatment. Most medical diagnoses were depression and personality disorders. Family practitioners completed questionnaires of all the patients who were seen by a psychiatrist at their clinic. Of the patients referred for psychiatric consultation on site, 45% would have been referred to a mental health clinic by the FP. Psychiatrists decided to refer only 35% for further treatment in a mental health clinic. The main advantages of this model, as reported by the family physicians, included: increased accessibility, availabil-

ity of non-stigmatic psychiatric consultation in a primary care setting, and improved patient compliance. Psychiatrists appreciated the valuable information given by the family practitioner and social worker, as well as the teamwork with the primary clinic staff [7].

ASSESSMENT OF QUALITATIVE PSYCHIATRIC LIAISON MODELS IN ISRAEL

A few questionnaire-based studies have investigated the opinions of primary care physicians (PCPs) on psychiatric management by PCPs in Israel. Fifty PCPs (practicing in urban primary care clinics; 24 were certified FPs and 26 were non-certified) were asked about their expectations of collaborative care with psychiatrists. Researchers examined the relationship between the PCPs' expectations and their professional characteristics. Psychological mindedness was measured using questionnaires. The certified FPs were found to be more psychologically minded and expressed more motivation and interest in cooperating with psychiatrists. Thirty-nine percent of them thought the consulting psychiatrist's role was to advise on psychosocial issues while leaving the clinical responsibility in their (the PCPs') hands. Almost all the physicians reported positive doctor-patient relationships [9].

In contrast, in another study nearly half the PCPs stated that patients suffering from depressive and anxiety disorders should be treated in primary mental health clinics; they also claimed that they experienced personal difficulty treating these patients. Most physicians (85%) stated that time constraints was the main barrier. No information was given regarding the PCP level of training (certified FPs as compared to non-certified FPs) [10].

This discrepancy may be explained by the difference in the PCP training. While experts in family medicine were more motivated, GPs who were not expert family physicians were less motivated and less interested in dealing with psychiatric issues as part of their practice. Other reasons suggested were the extra time

Psychiatric collaborative care models in the community have been shown to be as effective as standard psychiatric care in patients with depressive and anxiety disorder

required that was not adequately compensated, the context of the questionnaires where a pro-active approach by the PCP was preferred when the psychiatric liaison model was proposed, supporting the PCP decision making and management of psychiatric patients as compared to a model where the PCP deals with psychiatric illness without any support.

THE ISRAELI PUBLIC'S PREFERENCES REGARDING MENTAL HEALTH CARE

The Israeli public's preferences regarding mental health care were investigated by telephone interview. The sample comprised 1538 adults, representative of the Israeli population by gender, age, country of birth, marital status, formal education, religion, and household income. All participants were interviewed by

telephone about their knowledge, preferences and attitudes regarding mental health services. When asked to whom they would turn for help if they were in a very bad mood or disturbed by anxiety, 13% answered that they would contact a psychiatrist and 14% said they would contact a GP. When asked if they preferred that mental health treatment be provided in a primary general clinic or a psychiatric clinic, 46% preferred a psychiatric clinic, 35% preferred a general clinic, while 19% did not express any preference. Quality of care and the ability to consult with another physician were the most frequently cited reasons given by those who preferred a psychiatric clinic or psychiatric consultation in a general primary clinic, respectively [11].

Evaluation of these initiatives was descriptive or quantitative using questionnaires answered by staff members who participated in the initiatives. Hence the generalizability of their findings supporting the liaison model is limited.

PSYCHIATRIC LIAISON MODELS AROUND THE WORLD

When looking for evidence-based psychiatric liaison models around the world there is growing evidence of its non-inferiority and at times of its superiority when treating depressive and somatization disorders. When these managed care practices implemented quality improvement programs to increase opportunities for treating depression without imposing them on the family practitioners (they could choose to not take part in the liaison model), quality of care, mental health outcomes, and retention of employment of depressed patients over 1 year increased among patients who were treated within the framework of the liaison model, while medical visits did not increase overall.

The following is a detailed description of landmark randomized controlled trials that were published in leading journals investigating psychiatric liaison models around the world in the last decade [12-23].

EFFECT OF THE PSYCHIATRIC LIAISON MODEL IN PATIENTS WITH SOMATIZATION DISORDER

A few randomized controlled trials examined the effect of the liaison model in patients with somatization disorder. In these trials the only intervention modality was a detailed consultation letter from a psychiatrist to the PCP. The care recommendation letter contained recommendations on management, suggesting that regularly scheduled appointments be made for the patient (possibly every 4–6 weeks) so that the patient would not acquire symptoms in order to see the physician. A recommendation that physical examinations be performed at each visit to look for signs of disease, so that the symptoms would not be taken at face value, did not improve patients’ mental health but proved to reduce health care. Overall, this intervention did not improve patients’ emotional status but improved their physical function-

ing especially when suffering from co-morbid chronic physical diseases. Emotional and physical functioning were evaluated using the emotional functioning and physical functioning subscales of the short form SF-36. It is noteworthy that gender, age, and co-morbid psychiatric disorder did not affect the intervention’s outcome [12-15].

EFFECT OF THE PSYCHIATRIC LIAISON MODEL IN TREATING DEPRESSION IN THE COMMUNITY

Few randomized controlled trials have investigated the psychiatric liaison model in treating patients suffering from depression in primary care clinics. Most of these clinical trials took place in a large HMO organization in Washington State in the last 20 years. All were randomized controlled trials examining the effect of liaison models on outcome measures of depression treated in primary clinics. Over time, researchers’ intervention modalities became more sophisticated. The first was the IMPACT trial, a simple liaison model involving only psychiatrists and GPs that screened for patients suffering from depression and consisted of a complex multidisciplinary medical and psychological intervention. Another was the PATHWAY study which included older patients with longer follow-up [16-18].

In the former, PCPs were the case managers leading their patients’ treatment. The role of psychiatrists was consulting PCPs

Primary care physicians can play a leading role in diagnosing and treating patients suffering from depressive and anxiety disorders provided there is an accessible psychiatric consultation liaison model

and seeing these patients twice on a preplanned time schedule. Results were improved satisfaction with care (93.0% vs. 75.0%, $P < 0.03$), greater adherence to adequate dosage of antidepressant medication for 90 days or more (75.5% vs. 50.0%, $P < 0.01$), a significantly greater decrease in depression severity over time compared with controls (74% vs. 43.8% of at least 50% reduction in depressive symptoms, $P < 0.01$), and perceived rate of antidepressant medications ranging from helping somewhat to helping a great deal (88.1% vs. 63.3%, $P < 0.01$) [16].

Another study examined patients with persistent depressive illness 6 to 8 weeks after initiation of routine primary care treatment (step 1). These patients were “stepped up” to collaborative care where they received enhanced education and increased frequency of visits by a psychiatrist working with the primary care physician. These patients received more appropriate antidepressant pharmacotherapy in terms of dose and duration. They were more satisfied with their care, and achieved better outcomes over 6 months [17].

A more complex multidisciplinary intervention trial was the IMPACT randomized controlled trial study. This initiative aimed to determine whether quality improvement programs in managed care practices for primary care patients suffering from depression experienced improved quality of care, health outcomes and employment. Forty-six primary care clinics in managed care organizations in six states in the U.S. par-

ticipated in the study. Of 27,332 screened patients, 1356 with current depressive symptoms and 12 month, lifetime, or no depressive disorder were recruited. Quality improvement (QI) components were financial institutional commitment; training of local leaders including the GP, nursing supervisor, mental health personnel (continuing medical education, audit); training of local staff (workshops for nurses); and patient identification by screening. QI intervention groups included a medication intervention group and group or private cognitive behavioral treatment sessions. Nurses typically did an initial simple assessment followed by a review by the primary care physician who then typically either prescribed medication or referred the patient to a therapist with follow-up by the nurse. The psychiatrist was available as needed for consultation and redirection, but typically the psychiatrist was not the primary prescriber unless the case was more complex. At 6 months, 50.9% of the QI patients and 39.7% of the controls received counseling or took antidepressant medication at an appropriate dosage ($P < 0.01$), with a similar pattern at 12 months (59.2% vs. 50.1%, $P = 0.006$). There was no increase in the burden of care in the intervention group (no difference in the probability of having a medical visit at any point). At 6 months follow-up, 39.9% of the QI intervention group and 49.9% of the controls still met the criteria for probable depressive disorder with a similar pattern at 12 months (41.6% vs. 51.2%, $P = 0.005$) [18].

A 23 year follow-up study of these patients revealed that IMPACT patients were less depressed, functioned better physically, enjoyed a better quality of life, and were more satisfied with their depression care. This was true for both males and females, all age groups, ethnicities, degrees of depression, and physical co-morbidities. Although the benefits of IMPACT attenuated at 18 and 24 months, significant health benefits endured even 1 year after IMPACT resources were withdrawn. The number needed to treat was 4 at 12 months, 6 at 18 months and 9 at 24 months [19].

Similar findings were seen in the Pathways study, a randomized trial of collaborative care in patients with diabetes and depression treated in a primary care clinic. Patients in the intervention received either problem-solving therapy or enhanced education and support of antidepressant medication treatment prescribed by the primary care physician. Patients in the intervention group showed greater improvement in appropriate dosage of antidepressant medication in the first 6 month period [odds ratio (OR) 4.15, 95% confidence interval (95%CI) 2.28–7.55] and the second 6 month period (OR 2.90, 95%CI 1.69–4.98), less depression severity over time (OR 2.84, $P = 0.004$), a higher rating of patient-rated global improvement at 6 months (intervention 69.4% vs. usual care 39.3%, OR 3.50, 95%CI 2.16–5.68) and 12 months (intervention 71.9% vs. usual care 42.3%, OR 3.50, 95%CI 2.14–5.72), and higher satisfac-

tion with care at 6 months (OR 2.01, 95%CI 1.18–3.43) and 12 months (OR 2.88, 95%CI 1.67–4.97) [20].

A meta-analysis performed by a Dutch group that analyzed 10 randomized controlled trials (including 3408 patients) investigated psychiatric liaison models in which family practitioners led and managed treatment, with psychiatrists acting only as consultants (up to three consultations per patient). In these clinical trials the psychiatric consultation involved either the psychiatrist alone seeing patients at the primary care clinic, both the GP and the psychiatrist seeing patients together, or written letters of consultation delivered to primary care physicians. Their conclusion was that all the consultation models were superior to regular psychiatric care when treating patients with depressive or somatization disorders. Improvement in outcome was quantified as the "illness burden" which combines the following variables: general functioning, health care use, psychological symptoms, and medical symptoms. The effect was particularly significant for somatoform disorder, especially in patients' utilization of health care services, while a smaller, although also significant effect was found for the illness burden for patients with depressive disorders [21].

A meta-analysis of 62 studies of collaborative care showed that liaison models have a positive effect on antidepressant use and depressive symptoms (OR 1.92, 95%CI 1.54–2.39, OR 0.24, 95%CI 0.17–0.32). Since the variability among the included clinical studies was wide (in terms of methodology, primary care staff competency in mental health, institutional resource allocation, and more), one might question the validity of such a meta-analysis. In view of this, the regression that the meta-analysis tried to evaluate was the "active

Primary care physicians are motivated to play a leading role in the care of their psychiatric patients particularly when part of a psychiatric liaison model

necessary ingredients" required for optimal psychiatric care in various collaborative enterprises. The combination of the following covariates reduced the overall heterogeneity to 36% (low to moderate between study heterogeneity) and thus can be considered necessary components of liaison models: recruiting through systematic identification of patients ($P = 0.081$) and employing case managers with a specific mental health background ($P = 0.027$) who receive regular supervision ($P = 0.055$). This was found to be more effective than regular care [22].

From these studies, a number of conclusions may be derived regarding liaison models. First, accessibility for both patients and staff is advantageous in such models. It seems that the barrier of stigmatization when referring to a psychiatrist is decreased when the psychiatric consultation is given within a primary care medical setting. Second, these studies suggest non-inferiority and some studies even indicate superiority of diagnostic accuracy – specifically when treating depressive disorders, anxiety disorders and personality disorders. Third, these models increase patient compliance. There is also evidence of increased remission when treating depressive disorders. Lastly,

these studies reveal an augmentation of primary care staff skills and knowledge in the field of psychiatry while fostering a humanistic atmosphere in the primary clinic.

Following the growing evidence of the cost-effectiveness and efficacy of collaborative psychiatric care, a commission on mental health in the USA conducted a comprehensive study on U.S. mental health services. They suggested that collaborative primary care models be implemented in primary health care settings and reimbursed by public and private insurers. Health insurance programs and private insurers were recommended to identify and consider payment for core components of evidence-based collaborative care, including case management, disease management, supervision of case managers, and consultations to primary care providers by qualified mental health specialists that do not involve face-to-face contact with clients [23].

Primary care physicians in Israel come from diverse medical specialties. In the last decade most primary care physicians are experts in family medicine. Their knowledge of mental health issues stems from their residency education program, which includes a 3 month rotation in psychiatric clinics and a 3 year diploma course where, among other subjects, they participate in ongoing lectures and workshops on mental health. This is in addition to obligatory continuous medical education programs funded by HMOs in the field of mental health.

Recruitment to family residency programs in Israel includes a shadowing process of the nominee with an experienced FP who also explores the personality of the nominee and his or her suitability to the field of family practice. Hence, it is reasonable to assume that FPs are more attentive to the mental health issues of their patients as part of the holistic treatment they aim to provide.

In view of the mounting evidence of the advantages of collaborative mental care and acknowledging the growing need and the expertise of family physicians in Israel, it is time to augment the development and implementation of psychiatric liaison models in primary care clinics.

CONCLUSIONS

Collaboration between psychiatrists and primary care physicians around the world and in Israel has been studied in clinical trials. There is good evidence from both randomized controlled trials and descriptive studies that these enterprises improve the psychiatric care of patients suffering from depressive anxiety and somatization disorder. Pending the mental health reform in Israel, it is essential to promote a national psychiatric-primary care physician liaison model. The exact model should be tailored to the clinic's nature and needs, and to the capacities of the local psychiatric system.

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