

Integration of mental health care into primary care

Preliminary observations of continuing implementation phase

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ABSTRACT

Objective: The authors mainly focus on the initial observations of the implementation phase of a health project that aims to integrate mental health into primary care.

Methods: In the light of specific aims and objectives of both planning and curriculum development phases, 2-weeks of intensive psychiatric training consisting of basic theoretical and clinical concepts of psychiatry was imparted to a group of general practitioners and paramedical staff. In addition to assessing their pre-and post-training knowledge, attitude, and practice toward psychiatry, 2 internal Consultant Psychiatrists and participants evaluated the training course providing appropriate feedback to the organizers and trainers for modifying several adopted training methods, as well as a curriculum for subsequent courses.

Results: The 2-week psychiatric training of the medical personnel resulted in identifying several pros and cons of implementing this project at primary health care centers.

Additionally, the immediate and the post-training evaluations of trainees by numerous methods were characterized by favourable changes in their attitude, knowledge and enhanced motivation to practice psychiatry at primary health care centers.

Conclusion: The implementation of this project by training the first 3 groups of health personnel was successful, as evidenced both by the healthy encouraging comments of the evaluators and the post-training favourable positive responses of the trainees. The incorporation of mental health into primary care by offering condensed psychiatric courses to general practitioners should be the top training agenda as it is in line with the World Health Organization recommendations.

Keywords: Implementation, health project, integration, mental health, general practitioners, primary health care centers, psychiatric training.

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Beside reviewing the relevant literature, the authors have described elsewhere^{1,2} both the planning and curriculum development phases of an innovative health project that aims to integrate mental health care into primary care. Briefly

speaking, the central thesis of this project is to train primary care physicians/general practitioners (GPs) and paramedical personnel in primary care psychiatry in order to enhance their basic psychiatric clinical knowledge and interviewing skills. This

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psychiatric training course could help them to prevent, detect, diagnose, manage and deliver appropriate mental health services to primary care patients, presenting with psychiatric disorders. It will also help GPs to identify most difficult cases for referral to secondary/tertiary levels of mental health care. It is reported that the linkage of primary care with mental health care results in better communication between providers and systems, leading to improved patient care³ and certainly better quality of life. Beside linkage, researchers have further identified several other models that underlie the concept of integration.⁴⁻⁷ The overall emphasis of these useful models is to provide appropriate cost-effective mental health services in primary care settings both in rural and urban communities. Moreover, Selig went further, to suggest that critical value orientation related to integration of mental health care into primary care, should be introduced during undergraduate health programs.⁸ Evidently, the patients who most commonly visit primary care suffer from a variety of disorders, including anxiety and depressive disorders, somatoform disorders, substance use disorders, personality disorders, adjustment disorders and others. A minor proportion of them presents with childhood disorders, major psychotic disorders and dementias. However, some patients also manifest distressful subthreshold symptoms, which also need careful diagnosis and management.^{9,10} Although approximately 5% of patients with psychoses¹¹ may need psychiatric referrals to specialist consultation, there is converging evidence that approximately 15%-85% of patients consult GPs for the treatment of their psychiatric problems.^{10,12-15} The recognition rate and appropriate prescription of therapies for these disorders by GPs vary considerably and could be explained, inter alia, by study settings.¹⁶ In the Western world, primary care psychiatry is tremendously developed and extensively researched. This developmental mental health trend now identified worldwide has in fact revolutionized the management of previously neglected primary health care patients who used to present with distressful psychiatric and psychosocial problems. Moreover, family physicians and GPs are relatively well trained and have adequate skills to manage patients with minor psychiatric morbidity. In addition, they also have adequate skills to identify and refer relatively difficult psychiatric cases to secondary/tertiary levels of health care. Contrastingly, the developing countries are far behind in this regard. Although patients with psychiatric disorders, approximately 45% or maybe more, visit primary health care centers (PHCCs), yet there are no provisions for delivering mental health services in Arabian Gulf countries. In a prospective study of 96 new patients referred by GPs to a psychiatric clinic based in a primary care setting, the authors revealed that neurotic disorders including

neurotic depression (38%), anxiety disorders (10%), and anxiety-depressive state (21%) were the most frequent identified psychiatric disorders.¹⁷⁻¹⁹ In the Kingdom of Saudi Arabia, it was also found that a large proportion of patients approximately 47%, with clinically significant psychiatric disorders also presented at PHCCs.²⁰⁻²³ Taken together, these basic studies strongly suggest that the psychiatric problems at PHCCs are of greater magnitude, which often remain unidentified and untreated, and by an extension the psychiatric patients need appropriate mental health staff to offer appropriate mental health services to them at PHCCs. Most importantly in Arabian Gulf countries, the primary care physicians/GPs are comparatively less efficient to deal with patients manifesting with psychiatric disorders.²⁴ Therefore, GPs need intensive continuing training in primary care psychiatry in order to link mental health into primary care as envisaged by the World Health Organization (WHO).²⁵ It is expected that psychiatrically trained GP's would be in a better position to deliver appropriate mental health services to mental patients who tend to frequently attend primary care and general hospitals. In turn, they could further help reduce the development of different disabilities, overutilization of medical resources, and the incurring of higher economic costs^{26,27} associated with such patients. This paper will mainly focus on the preliminary findings of the continuing implementation phase of this health project, which aims to integrate mental health into primary care.

Methods. Trainees, trainers and internal evaluators. First, our team of experts invited one GP and one member of the paramedical staff for training from the same PHCC. The trainers also decided to make a group of 25-30 participants in each training course. This procedure was adopted as after completing the training course, trainees were expected to brief other health staff working with them, and at the same time practice psychiatry, in particular consulting psychiatrists on the telephone. They were also advised to refer patients with major psychiatric disorders or difficult psychiatric cases both to psychiatric clinics in general hospitals and mental hospitals. Secondly, they should identify and manage, by counselling, those patients who do not require extensive evaluation and psychotropic drug prescribing. Thirdly GPs and nursing personnel should collectively deliver appropriate mental health services to the primary care clients. We have organized 3 psychiatric training courses on 3 separate occasions as shown in Table 1. Up to now, only 77 participants have been trained. We will describe comprehensively the training of the first group of trainees, and the prototype of subsequent psychiatric training courses. However, we will also highlight the

Table 1 - Distribution of primary health care center staff trained in primary care psychiatry (n=77)*.

Group	Participants			
	GPs	Nurses	Midwives	Total
First	7	16	2	25
Second	13	11	-	24
Third	18	9	1	28
Total	38	36	3	77

GP=general practitioner, n=number, *= medical and paramedical staff n=77 drawn from 65 primary health care centers

necessary modifications made during the 2nd and 3rd training courses. These changes were recommended collectively by 2 internal evaluators, participants and expert trainers. The internal evaluators used predesigned forms having items that described methods and contents of presentation, practical significance of selected topics, time limit, types of audiovisual aids, and clarity of delivered message. Similarly, the participants also evaluated the course structure by offering their opinion on a predesigned proforma that consisted of several items with subitems with regard to lectures, speakers, teaching methods, practical sessions and case demonstrations, logistics, and other related questions. The trainers were 2 Consultant psychiatrists, 6 Psychiatric Specialists, 4 Psychiatric Residents, 3 Nursing Directors, and one Educationist, primary care Doctor, and Psychologist. All the trainers and internal evaluators have extensive administrative, clinical, research, education and teaching experience in psychiatry and community medicine.

Training schedule, course and place of training. Our team structured a suitable 2-week timetable for the first training course that was started in July 1995. The authors used the knowledge, attitude and practice (KAP) questionnaire and written case vignettes with multiple questions in order to assess the trainees' pre-training information with regards to psychiatry. The knowledge, attitude and practice questionnaire, used in our previous research,²⁴ was redesigned separately for GPs and nursing staff. The KAP questionnaire consisted of 31 items, 12 of which tapped detailed sociodemographic data of GPs. The other 19 items were related to different aspects of psychiatry and they were asked to choose one from 1-6 responses, as follows 1. Strongly agree, 2. Agree, 3. Sometimes agree, 4. Don't agree, 5. Disagree, 6. Strongly disagree. The KAP questionnaire designed for paramedical staff

included sociodemographic variables plus 12 questions to be answered by "yes or no" were relating to nursing education and practice. The other 14 items assessed their opinion regarding different aspects of psychiatry and they were also asked to choose one from 1-6 responses, as above. Knowledge, attitude and practice questionnaires and case vignettes are highly useful and sensitive tools for evaluating pre-training base knowledge as well as post-training improvements in trainees' skills.^{24,28} During the first 5 days of the week, the trainers taught the participants several topics included in the primary care psychiatry curriculum² that addressed most relevant issues congruous with other researchers.^{29,30} These topics were: 1. Rationale and justifications of integration of mental health into primary health care (PHC), 2. Primary health care and psychiatry from a British point of view, 3. Classification of psychiatric disorders and psychopathology, 4. Interviewing techniques, communication skills, and mental status examination, 5. Methods of recognition of psychiatric disorders at PHCCs, 6. Consultation techniques at PHCCs, 7. Mood and anxiety disorders, 8. Psychiatric nursing at PHCCs, 9. Somatoform disorders, 10. Schizophrenia and other psychotic disorders, 11. Brief outline of child psychiatry, 12. Substance use disorders, 13. The contribution of social and behavioral sciences to primary care psychiatry, 14. Geriatric psychiatry and organic brain syndromes, 15. Prevention of psychiatric disorders and mental health education, 16. Psychopharmacological treatments of mental disorders, 17. Psychotherapy and counselling, 18. Psychiatric emergencies, 19. Complete management and follow-up of acute psychotic disorders, 20. Overall management and follow-up of chronic psychiatric patients, 21. Problem-solving techniques, 22. Basic PHC researches, and finally 23. Referral system. On day 6 on the first week we organized a workshop on integration of mental health into primary care-the pros and cons that was followed by course evaluation and post-training assessment methods. During the first 2 days in week 2, training activities were problem solving techniques, role play and one workshop on each prevention and somatic presentation of mental diseases at PHCCs. In addition, there was a discussion on verbal as well as written feedback responses of the participants and the evaluators. Each training activity was allotted half to one hour. The next 2 days activities were a comprehensive demonstration of cases with anxiety, mood, schizophrenic and somatoform disorders. At the same time, the interviewing and mental status examination techniques were also demonstrated. Finally, a group discussion regarding open cases and psychotropic drugs was also held. The overall emphasis was on comprehensive integrated management of the patients with psychiatric disorders. The lectures and other training activities

were held at Continuing Medical Education and Community Services (CME&CS), Buraidah, Kingdom of Saudi Arabia while practical case presentations were organized by Buraidah Mental Health Hospital. The training of the last 2 days in week 2 was held at Al-Qassim Psychiatric Rehabilitation Center (APRC), Kingdom of Saudi Arabia which delivers health services exclusively to patients with substance use disorders. The teaching activities were general orientation to APRC and its admission and discharge policies, multidisciplinary approach, communication and interviewing skills, role of APRC in following patients' care in the community, demonstration of drug abuse cases, and group-work preparation. There was a detailed discussion regarding feedback responses, course evaluation and immediate post-training tests. The last session held at CME&CS was a group meeting of all participants, trainers and evaluators in which we highlighted certain aspects including debriefing regarding this program to colleagues working at PHCCs, practicing psychiatry at PHCCs, identifying and referring possible psychiatric patients to psychiatric clinics and hospital and telepsychiatry.

Training methods. The trainers used different methods of teaching and learning which included formal lectures and hand outs, workshops, role play, problem-based tasks, interactive group discussions, seminars, self-learning, clinical and practical training, background reading, and field work. The trainers used modern equipment for delivering the lectures. The participants were encouraged to be interactive throughout lectures, workshops, group discussions, detailed case preparation and discussion, and role play. In doing so, they provided extremely healthy feedback responses regarding the overall performance of the trainers and also suggestions for some modifications in the course structure. This was most evident in the analysis of course evaluation carried out by the participants themselves. They further noticed that lectures were compatible with primary care psychiatry and were both well prepared and clearly delivered by the trainers in simple English language. The participants also noticed that speakers were confident and they used latest methods of training in communicating important messages. However, the participants were most impressed by workshops and clinical case demonstrations, as revealed in their course evaluation.

Results. Pre-and post-training assessment. The pre-training evaluation of participants, carried out by using aforesaid predesigned questionnaires and proformas by 2 Consultants and other experts, showed that almost all of them agreed that management of psychiatric problems is not the sole responsibility of psychiatric professionals, and PHC

teams must have adequate training in clinical psychiatry. Hence, they strongly supported diversification and deprofessionalization of mental health services. In general, they showed deficiencies in overall knowledge regarding treatment modalities and adverse effects of psychiatric drugs. Their attitudes to psychiatric disorders and role of psychotherapy and counselling in the management of mild psychiatric disorders was positive. But they need further attitudinal improvement and more knowledge in psychotherapies. Their responses were varied as to recognize difficult cases and refer such patients to psychiatrists. Additionally, nurses emphasized multidisciplinary approach and a need for more information regarding antidepressant therapy. Further, all of them have global deficiencies in diagnosing and managing psychiatric cases. Surprisingly, nurses were more accurate in diagnosing patients than the doctors. The post-training assessment of GP's and nurses showed considerable improvements in their knowledge base and attitude towards psychiatry which is consistent with other research.^{31,32} Similarly, they also showed tremendous changes in answering questions related to multiple written case vignettes. All were confident in dealing skillfully with patients manifesting psychological symptoms. They showed great improvement in recognizing and treating psychiatric disturbances at PHCCs, often independently but sometimes in collaboration with psychiatric colleagues. Most of them identified cases of anxiety and depression (92%) but were unable to appreciate the contribution of personality factors and alcohol abuse in the psychopathology of mental disorders. Most of them (98%) appreciated the role of psychological and physical treatments. All participants showed further improvements in helping these clients at community level. They also realized the role of psychosocial and cultural factors in the etiology of psychiatric disorders. Notably, psychologically trained nurses are reported to diagnose and treat correctly most patients with common psychiatric conditions.³³ Additionally, the 2 internal evaluators also provided very comprehensive reports regarding this program, which suggested very good quality of work and its valuable impact on the trainees who strongly attested to the significance of integration of mental health into primary care (100%). Almost all the participants commented that they have tremendously benefitted from this course. Overall, most of the participants (98%) showed more favourable changes in their overall knowledge of psychiatry. The trainers were also equally encouraged as to the success of this program.

The pros and cons of integration of mental health into primary care. The organizers discussed obstacles of integrating mental health into primary care in one of the workshops during this training

course. The authors selected the results of this workshop for detailed presentation as it is the crux of the entire issue. Further, these dilemmas are possible eye openers for planners, organizers and trainers in terms of implementation and thereafter achieving the preconceived goals and specific objectives of this pilot project.^{1,2} In brief, the primary aims of this ambitious project were to integrate mental health into primary care, training all GPs and paramedical staff working at PHCCs and developing a curriculum encompassing clinical and community psychiatry for this purpose. For achieving these aims, the following specific objectives were set forth; 1. To increase the awareness of the targeted groups of psychiatric problems, 2. To improve the knowledge of the targeted groups of community psychiatry, 3. To improve the knowledge of the targeted groups for delivering mental health services at various community levels, 4. To improve psychiatric clinical and interviewing skills of the targeted groups, 5. To improve the attitudes of the targeted groups toward psychiatry, mental patients and psychiatric hospitals, 6. To improve the ability of the GPs to manage the uncomplicated cases of psychiatric, psychological and social problems, 7. To improve the ability of GPs to identify patients who require referral to the secondary and tertiary psychiatric services and finally 8. To promote relevant research and training related to community psychiatry.^{1,2} Three groups of participants discussed the pros and cons of integrating mental health into primary care. Each group had a leader from the participants and a psychiatric specialist for supervising the discussion, formulation of difficulties, and presentation of findings. All 3 groups concluded their findings more or less in a similar fashion, which were as follows: 1. Psychiatrically untrained doctors, nurses and other manpower, 2. Time constraint, 3. Mental illness viewed as social stigma, 4. Ill equipped PHCCs from psychiatric perspectives, 5. Lack/or no provision of psychotropic drugs at PHCCs, 6. Nonacceptance of psychiatric problems by patients, 7. Irregular follow-up and poor compliance, 8. Language/communication barrier, 9. Lack of transportation for home visits, 10. Lack of cooperation from family members, 11. Lack of special psychiatric referral letters and feedback responses, 12. Misuse of psychotropic drugs, 13. Unfair attitude of PHC staff towards psychiatry, 14. Lessen the burden on hospitals, 15. Possible management of simple straightforward psychiatric cases, 16. Primary health care centers could deliver the message to the people at large that the psychiatric problems exist in the community, 17. Help in differentiating psychiatric/emotional problems from physical diseases, 18. Could establish professional therapeutic relationship with the patients, 19. To identify the cause/risk factors of psychiatric/emotional problems, 20. Offering mental health services including prevention

to all PHC clients presenting with psychiatric conditions, 21. Early identification coupled with the reduction of duration, severity and associated disabilities, 22. Provision of rehabilitation, 23. Counselling, 24. Reduction of stress and improvement in quality of life, 25. Promotion of mental health, and finally 26. Help in reducing social stigma. These findings were discussed with higher authorities and tentative solutions offered were as follows: 1. Elimination of all enumerated difficulties/cons from 1-13 in dealing with clients in the community through proper continuing psychiatric training and seminars, 2. Development of human and non-human resources including posters, audiovisual aids, pamphlets, and small booklets highlighting psychological messages in a simple and understandable manner, 3. Involvement of patient and family members both in understanding psychiatric problems and decision making, 4. Understanding of social and cultural beliefs of the society, 5. Conduction of community group meetings, home visits, and improving their attitudes towards psychiatry, 6. Healthy coordination between mental health professionals and PHC team to develop and improve community consultation-liaison services, 7. Provision of delivering mental health services at some selected PHCCs by establishing community mental health centers, 8. Mental health team's monthly visit to such centers, and 9. Designing a special psychiatric form for referring difficult patients to secondary mental health institutions. Additionally, the authors suggest that concerted efforts made at all levels will certainly result in offering mental health services at primary care level³⁴ including rural communities.³⁵ Primary health care systems may require restructuring in order to be "supportive of emotional labor, health promotion, empowerment of service users and of care which takes the subjectivity of the illness experience for the patient into account".³⁶

Modifications made during subsequent training courses. The 2nd and 3rd psychiatry training courses were held in November 1995 and October 1997. In accordance with the recommendations made by the first course participants, 2 Consultant evaluators, and psychiatric trainers, the following new topics for teaching were included; 1. Biopsychosocial model, 2. Psychiatric aspects of epilepsy, 3. Some aspects of adolescent psychiatry at PHCCs, 4. Some selective childhood disorders-enuresis, phobia, mental subnormality, attention deficit hyperactivity, 5. Sleep disorders, 6. Psychosexual dysfunctions, and 7. Mental health education and promotion. However, the following topics were excluded, 1. Psychiatry from British point of view, 2. Details of child psychiatry, 3. The contribution of social and behavioral sciences to PHC, and 4. The details of psychopathology and classification. The inclusion of a biopsychosocial

model was considered important as researchers have often emphasized the significance of biologic, psychologic and social factors in health and disease. The primary care physicians/GPs should have a basic knowledge of those constructs,⁷ which help in understanding the psychopathology of psychiatric disorders. Further, derived from the concept of clinical case conference model, relatively tremendous emphasis was placed on case identification, techniques of interviewing patients, formulation of the case, complete discussion and finally comprehensive management. Other training activities like role play, workshops, and problem solving techniques were also greatly expanded.

Previously trained personnel and follow-up intermittent training activities. On International Mental Health Day, 11 October 1995, the trained GP's and nurses were invited to participate in the discussion on rationale and justifications of integration of mental health into PHC, global strategies for promotion of mental health, constraints faced at PHC practice, mental health awareness program at school and community levels, nurse-psychiatric patient and practical issues, and finally prevention of mental health problems. Our team also organized 2 7-hour programs in the year 1996, which were entitled "on-job performance" aimed at evaluating the trained personnel. The program activities included the importance of continuing medical education, mental health "an overview", integration of mental health into PHC-aims, objectives, and "a dream come true", KAP and vignettes evaluation, post-training workshop on the pros and cons of integration of mental health into PHC. In summary, the evaluation of the candidates indicated marked improvement in their attitude and sustained knowledge of psychiatric conditions coupled with recognition and treatment by psychological/nonpsychopharmacological measures. During workshop discussion, 2 additional suggestions were made; 1. Practice of counselling and family therapy within time constraints, and 2. Availability of at least antidepressants at PHCCs. One day program for "certification ceremony" was held in the year 1997 that included integration of mental health into PHC-past, present and future, project summary, and trainees' feedback of courses I, II, III with brief discussion. The distribution of certificates was highly appreciated by all the participants who, in turn, were stimulated to practice psychiatry at PHCCs.

Causes of interruption in continuing psychiatric training program. There are a variety of reasons that could explain the delay in completing this health project. Some primary care physicians/GPs permanently leave the country and new doctors replacing them also need psychiatric training, which must be a continuing dynamic process. Additionally, the health administration does not like to see primary

care services being compromised due to training schedules of GPs. Similarly, the vacation of trainers and also trainees contributes to this unavoidable situation. Therefore, psychiatric training of doctors is usually scheduled when enough doctors are present to cover the duties of their colleagues. Another equally important reason is that doctors from PHCCs are also called for training in other programs such as management of diabetes, asthma, chronic heart diseases. However, this project is still dynamically continuing. We have slated 5 psychiatric training courses for GPs to be conducted in the year 2001. Most importantly, each training course is now accredited with 13 hours by Saudi Council for Health Specialities. We also expect to psychiatrically train most of the PHCC health workers within a period of the next 2 years. Finally, the entire package of this project and training courses including all evaluation tools, KAP questionnaire, clinical case vignettes and structured curriculum is available with the first author.

Discussion. In Arabian Gulf countries, there is a converging evidence that patients with a variety of psychiatric problems visit primary care physicians for treatment.^{17-23,37} Therefore, the planning curriculum development and the continuing implementation of this health project is timely in the Kingdom of Saudi Arabia. This was an important developmental health trend identified worldwide especially in developed countries a long time ago. Evidently, the mental health has been now integrated in primary health care in many countries,^{35,38-40} developed as well as developing countries. Alternatively, some researchers have raised concerns with regards to the treatment of patients with severe chronic mental illness in primary care that has financial implications for private health providers.⁴¹ In contrast to most models for financing care that is fee-for-service, a shared-risk model of capitation provides true financial incentives for integrating mental health into primary care.⁴² Unlike previous policies,⁴³ the rapid changes in the USA health environment system threaten to undo the integration of mental health care into primary care,⁴⁴ attributed primarily to financial issues. In a study of economic analysis carried out in low-income countries, however, the treatment of common mental disorders in primary care was feasible and practicable.⁴⁵ Notably, GPs have a very limited role in the management of patients with serious mental illness.⁴⁶ Alternatively, a primary care psychiatrist whose primary care training is supervised by an internist could be of tremendous help in delivering care for and improving outcome of patients with severe mental illness.⁴⁷ Consistent with other reports^{35,40} and our own previous research,²⁴ the participants showed overall improvement in their knowledge and clinical

practice. However, like other researchers,⁴⁸⁻⁵⁰ they in collaboration with trainers identified many realistic difficulties and advantages during the training course as well as on-job performance. The existing practical and attitudinal obstacles need systematic evaluation and thereafter find their proper solutions. For instance instead of psychotropics, several psychological treatments, such as counselling,^{11,51} cognitive therapy⁵² and behavioral therapy⁵³ have been prescribed usefully in primary care practice. This will solve the problems of inappropriate prescriptions of psychotropic drugs by GPs and so addiction problems in particular with overprescriptions of benzodiazepines.^{1,2} Like other researchers from developing countries,⁵⁴ we suggest that the psychiatric training of all primary care doctors must be continuous due to aforesaid dynamic reasons plus further improving and sustaining their clinical skills. Moreover, the interviewing skills of the physicians which can be improved by training and their ability to identify psychiatric/emotional disorders are related to each other.⁵⁵ These findings were supported robustly by a study which concluded that primary care physicians/GPs should be trained in specific interviewing skills, in order to improve their ability to identify mental disorders in their practices.⁵⁶ The training of GPs will also enhance their diagnostic and management skills so that they could judiciously use polypharmacy and adequately prescribe various psychotropics to primary care patients.⁵⁷ The integration of mental health is also extended into schools⁵⁸ and so social work psychological services⁵⁹ are linked to primary care. Further, there are provisions of psychological services for human immuno-deficiency virus (HIV)-infected patients,⁶⁰ children and adolescents,⁶¹ and elderly clients⁶² in primary care settings, which reflects that primary care psychiatry is constantly developing in western countries.

In conclusion, there are numerous advantages of incorporating mental health into the primary care system. This structured training program resulted in positive changes in skills and attitudes of trainees. There still remains some practical and attitudinal obstacles, that need to be properly addressed by relevant authorities. We recommend that the psychiatric training of GPs should be continuing and a more or less similar project should be implemented throughout the Kingdom of Saudi Arabia including other Gulf countries. In summary, there will be an overall improvement in delivery of mental health services to primary care clients presenting with psychiatric conditions who, like any other health consumers, should lead a better quality of life.

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References

1. Abdelgadir MH, Qureshi NA, Al-Ghamdy YS, Tawfik MH, Al-Shazli NH, Al-Amri AH et al. Integration of mental health into primary health care in Al-Qassim region, Saudi Arabia: planning phase I. *Eastern Mediterranean Health Journal* 1999; 5: 378-384.
2. Qureshi NA, Abdelgadir MH, Al-Ghamdy YS, Tawfik MH, Al-Shazli NH, Al-Amri AH et al. Integration of mental health into primary health care in Al-Qassim region, Saudi Arabia: curriculum development II. *Eastern Mediterranean Health Journal* 1999; 5: 385-388.
3. Dea RA. The integration of primary care and behavioral health care in northern California Kaiser-Permanente. *Psychiatr Q* 2000; 71: 17-29.
4. Bird DC, Lambert D, Hartley D, Beeson PG, Coburn AF. Rural models for integrating primary care and mental health services. *Adm Policy Ment Health* 1998; 25: 287-308.
5. Mechanic D. Approaches for coordinating primary and speciality care for persons with mental illness. *Gen Hosp Psychiatry* 1997; 19: 395-402.
6. Strosahl K. Mind and body primary mental healthcare: new model for integrated services. *Behav Health Tomorrow* 1996; 5: 93-95.
7. Strain JJ, Pincus HA, Houpt JL, Gise LH, Taintor Z. Models of mental health training for primary care physicians. *Psychosom Med* 1985; 47: 95-110.
8. Selig S. Integrating health and mental health: opportunities in undergraduate health programs. *Health Values* 1986; 10: 9-13.
9. Olfson M, Broadhead WE, Weissman MM, Leon AC, Farber L, Hoven C et al. Subthreshold psychiatric symptoms in a primary care group practice. *Arch Gen Psychiatry* 1996; 53: 880-886.
10. Pini S, Perkonning A, Tansella M, Wittchen HU, Psich D. Prevalence and 12-month outcome of threshold and subthreshold mental disorders in primary care. *J Affect Disord* 1999; 56: 37-48.
11. King MB. Psychiatry in general practice: counselling, consultation and chronic care. In: recent advances in clinical psychiatry - 8 Grossman KG, editor. London, United Kingdom: Churchill Livingstone; 1993. p. 19-35.
12. Hamilton J, Campos R, Creed F. Anxiety, depression and management of medically unexplained symptoms in medical clinics. *J R Coll Physicians Lond* 1996; 30: 18-20.
13. Henderson S, Andrews G, Hall W. Australia's mental health: an overview of the general population survey. *Aust N Z J Psychiatry* 2000; 34: 197-205.
14. Bijl RV, Ravelli A. Psychiatric morbidity, service use, and need for care in the general population: results of The Netherlands Mental Health Survey and Incidence Study. *Am J Public Health* 2000; 90: 602-607.
15. Ustun TB, Gater R. Integration of mental health into primary care. *Cur Opin Psychiatry* 1994; 7: 173-180.
16. Bebbington PE, Marsden L, Brewin CR. The need for psychiatric treatment in the general population: the Camberwell Needs for Care Survey. *Psychol Med* 1997; 27: 821-834.
17. El-Rufaie OEF. Referrals by general practitioners to a primary health care psychiatric clinic: diagnostic status and sociodemographic characteristics. *Br J Psychiatry* 1995; 6: 82-92.
18. El-Rufaie OEF, Absood G. Minor psychiatric morbidity in primary health care: prevalence, nature, and severity. *Br J Psychiatry* 1993; 39: 159-166.
19. El-Rufaie OEF. A psychiatric clinic in primary care setting: evaluating the experience. *Saudi Med J* 1988; 9: 20-24.
20. Al-Faris EA, Al-Shammari SA, Al-Hamad AM. Prevalence of psychiatric disorders in an academic primary care

- department in Riyadh. Saudi Med J 1992; 13: 49-33.
21. El-Rufaie OEF, Albar AA, Al-Dabal BK. Identifying anxiety and depressive disorders among primary care patients. a pilot study. Acta Psychiatr Scand 1988; 77: 280-282.
 22. Al-Shammari SA, Khoja TA, Al-Subaie A. Anxiety and depression among primary care patients in Riyadh. Br J Psychiatry 1994; 22: 53-64.
 23. Al-Faris EA, Al-Hamad AM, Al-Shammari SA. Hidden and conspicuous psychiatric morbidity in Saudi primary health care. a pilot study. Br J Psychiatry 1995; 6: 162-175.
 24. Qureshi NA, Hegazy IS, Al-Beyari TH, Al-Amri AH, Sherbini LAM, Abdelgadir MH et al. The attitude of primary care physicians to psychiatry. Saudi Med J 1995; 3: 217-221.
 25. World Health Organization. The introduction of a Mental Health Component into Primary Health Care. Geneva: World Health Organization; 1990.
 26. Pallak MS, Cummings NA, Dorken H, Henke CJ. Effect of mental health treatment on medical costs. Br J Psychiatry 1994; 1: 7-12.
 27. Kessler RC, DuPont RL, Berglund P, Wittchen H-U. Impairment in pure and comorbid generalized anxiety disorder and major depression at 12 months in two National Surveys. Am J Psychiatry 1999; 156: 1915-1923.
 28. Sriram TG, Chandrashekar CR, Isaac MK, Srinivasa Murthy R, Kishore Kumar KV, Moily S et al. Development of case vignettes to assess the mental health training of primary care medical officers. Acta Psychiatr Scand 1990; 82: 174-177.
 29. Halbreich U. Teaching normal and abnormal behavior to primary care physicians. Br J Psychiatry 1994; 24: 115-20.
 30. Kerwick S, Jones R, Mann A, Goldberg D. Mental health priorities in general practice. Br J Gen Pract 1997; 47: 225-227.
 31. Das MP, Chandrasena RD. Medical students' attitude towards psychiatry. Can J Psychiatry 1988; 33: 783-787.
 32. Chung MC, Prasher VP. Differences in attitudes among medical students towards psychiatry in one English university. Psychol Rep 1995; 77: 843-847.
 33. Sokhela NE, Uys LR. The integration of comprehensive psychiatric/mental health care into the primary health system: diagnosis and treatment. J Adv Nurs 1999; 30: 229-237.
 34. Tansella M. Making mental health services work at the primary care level. Bull World Health Organ 2000; 78: 501-502.
 35. Owen C, Tennant C, Jessie D, Jones M, Rutherford V. A model for clinical and educational psychiatric service delivery in remote communities. Aust N Z J Psychiatry 1999; 33: 372-378.
 36. Petersen I. Comprehensive integrated primary mental health care for South Africa. Pipedream or possibility? Soc Sci Med 2000; 51: 321-334.
 37. Al-Haddad MK, Al-Garf A, Al-Jowder S, Al-Zurba FI. Psychiatric morbidity in primary care. Br J Psychiatry 1999; 5: 21-26.
 38. La Grenade J. Integrated primary mental health care. Br J Psychiatry 1998; 47: 31-33.
 39. Malcolm L, Barnett P. Decentralisation, integration and accountability: perceptions of New Zealand's top health service managers. Br J Psychiatry 1995; 8: 121-134.
 40. Mohit A, Saeed K, Shahmohammadi D, Bolhari J, Bina M, Gater R et al. Mental Health manpower development in Afghanistan: a report on a training course for primary health care physicians. Br J Psychiatry 1999; 5: 373-377.
 41. Cutler DL, McFarland BH, Winthrop K. Mental health in the Oregon Health plan: fragmentation or integration? Br J Psychiatry 1998; 25: 361-386.
 42. Goldberg RJ. Financial incentives influencing the integration of mental health care and primary care. Psychiatr Serv 1999; 50: 1071-1075.
 43. Strosahl K, Robinson P, Heinrich RL, Dea RA, Del Toro I, Kisch J et al. New dimensions in behavioral health/primary care integration. HMO Pract 1994; 8: 176-179.
 44. Klinkman MS, Okkes I. Mental health problems in primary care: a research agenda. Int J Psychiatry Med 1998; 28: 361-374.
 45. Chisholm D, Sekar K, Kumar KK, Saeed K, James S, Mubbashar M et al. Integration of mental health care into primary care. Demonstration cost-outcome study in India and Pakistan. Br J Psychiatry 2000; 176: 581-588.
 46. Bindman J, Johnson S, Wright S, Szmukler G, Bebbington P, Kuipers E et al. Integration between primary and secondary services in the care of the severely mentally ill: patients' and general practitioners' views. Br Med J 1997; 171: 169-174.
 47. Golomb BA, Pyne JM, Wright B, Jaworski B, Lohr JB, Bozzette SA. The role of psychiatrists in primary care of patients with severe mental illness. Psychiatr Serv 2000; 51: 766-773.
 48. Nickels MW, McIntyre JS. A model for psychiatric services in primary care settings. Psychiatr Serv 1996; 47: 522-526.
 49. Tausig M. Detecting "cracks" in mental health service systems: application of network analytic techniques. Am J Community Psychol 1987; 15: 337-351.
 50. Abiodun OA. Mental health and primary care in Africa. East Afr Med J 1990; 67: 273-278.
 51. Holden JM, Sagovsky R, Cox JL. Counselling in a general practice setting: controlled study of health visitor intervention in treatment of post-natal depression. Br Med J 1989; 298: 223-226.
 52. Teasdale JD, Fennell MJV, Hibbert GA, Amies PL. Cognitive therapy for major depressive disorder in primary care. Br Med J 1984; 144: 400-406.
 53. Robson MH, France R, Bland M. Clinical psychologist in primary care: controlled clinical and economic evaluation. Br Med J 1984; 288: 1805-1808.
 54. Sriram TG, Moily S, Kumar GS, Chandrashekar CR, Isaac MK, Murthy SR. Training of primary health care medical officers in mental health care. Errors in clinical judgement before and after training. Gen Hosp Psychiatry 1990; 12: 384-389.
 55. Bowman FM, Goldberg DP, Millar T, Gask L, McGrath G. Improving the skills of established general practitioners: the long-term benefits of group teaching. Med Educ 1992; 26: 63-68.
 56. Giron M, Manjon-Arce P, Puerto-Barber J, Sanchez-Garcia E, Gomez-Beneyto M. Clinical interview skills and identification of emotional disorders in primary care. Am J Psychiatry 1998; 155: 530-535.
 57. Tyrer P. Drug treatment of psychiatric patients in general practice. Br Med J 1978; 277: 1008-1010.
 58. Kubiszyn T. Integrating health and mental health services in schools: psychologists collaborating with primary care providers. Clin Psychol Rev 1999; 19: 179-198.
 59. Badger LW, Ackerson B, Buttell F, Rand EH. The case for integration of social work psychological services into primary care practice. Health Soc Work 1997; 22: 20-29.
 60. Dodds S, Blaney NT, Nuehring EM, Blakley T, Lizzotte JM, Potter JE et al. Integrating mental health services into primary care for HIV-infected pregnant and non-pregnant women: Whole Life a theoretically derived model for clinical care and outcome assessment. Gen Hosp Psychiatry 2000; 22: 251-260.
 61. Mironov NE. Current features of mental health care of children and adolescents in the primary health care system. Gig Sanit 2000; 4: 28-33.
 62. Gallo JJ, Rabins PV, Liffie S. The 'research magnificent' in late life: psychiatric epidemiology and the primary health care of older adults. Int J Psychiatry Med 1997; 27: 185-204.