

**EXPLORATION OF ATTITUDES OF MEDICAL PRACTITIONERS TO  
MENTAL HEALTH SERVICES INTEGRATION IN PRIMARY CARE  
IN YEREVAN, ARMENIA, 2005**

**Master of Public Health Thesis Project Utilizing Professional Publication Framework**

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## **Abstract**

**Background:** Taking into account the documentation by WHO on the current magnitude of mental health problem it is essential to have a public health approach in order to reduce the burden of mental health disorders. This can be accomplished by improved accessibility to mental health care and increased early diagnosis of mental health disorders. According to WHO one of the pathways to improve mental health situation, particularly for low-income countries, is to integrate mental health services in primary care.

**Magnitude :** Outpatient care (primary care) is poorly developed in Armenia, resulting in more inpatient admissions. Only ten of the 33 polyclinics of Yerevan have an office providing psychiatric and psychological services.

**Objective:** It is essential to identify and understand factors associated with perceived need for collaboration between primary care providers and mental health professionals. The objective of the research is to explore medical practitioners' attitude towards the integration of mental health care to primary care and their practice with patients with mental health disorders.

**Methods:** Twenty in-depth interviews were conducted in two primary care settings from July 9, 2005 to August 10, 2005 with 20 general practitioners.

**Results:** Medical practitioners emphasized the importance of integration of a mental health professional in primary care. However, they mentioned that there are some possible obstacles for mental health integration in primary care, such as absence of governmental policy/regulations, stigmatization of mental disorders, lack of accessible information about mental health, financial and policy issues.

**Conclusion:** The current worrisome mental health situation in Armenia can be substantially improved if right solutions are suggested and incorporated in mental health policy change strategy. One of the main factors for policy change: understanding of mental health problem magnitude for population well-being among outpatient care providers is already in place.

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## **Introduction**

*Health is not merely the absence of disease or infirmity but a state of complete physical, mental and social well-being. (WHO 2005)*

By making this definition World Health Organization (WHO) is recognizing the importance of mental health as major component of health and well-being of all individuals. (WHO, 2001) Mental health is defined as a state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society, and meet ordinary demands of everyday life. (American Psychiatric Association, 1994)

The ability to study, identify and deal with mental health problems becomes more and more essential for prevention of development of both mental and bodily disorders. (Des Jarlais, 1995) Mental and behavioral disorders are a set of disorders characterized by some combination of abnormal thoughts, emotions, behavior, and relationship with others. (WHO 2001) Holistic understanding of mental health disorders is impossible in case of artificial separation of biological, psychological and social factors. (Brown, 2004) Mental disorders are similar to many physical disorders as they are the result of a complex of all these factors. Thus, mental health “should be regarded with anything like the same importance as physical health”. (WHO 2001)

In most parts of the world mental health and mental disorders are disregarded as an important public health challenge. (Des Jarlais, 1995, Plsek, 2001) Nevertheless, taking into account current magnitude of mental health problem, multifaceted etiology, stigmatization and disregard as well as significant treatment gap it is essential to have a public health approach to reduce burden of mental health and behavioral disorders. (WHO 2001)

## **Background**

Studies conducted so far about mental health disorders burden and their recognition and treatment have led to several significant findings. In essentially every country, most people with mental disorders are not seen in specialist services. (Andrews, 2001, Kessler, 2005)

Most primary care professionals are aware of psychological disorders, but the correspondence between clinician recognition and the actual incidence of these problems is only weak to moderately strong. (Nolan, 2004)

The mental disorders seen in primary care settings are a major public health problem. Poor identification of mental health problems or bodily problems stipulated from psychological and social conditions (psychosomatic diseases such as hypertension, coronary heart disease, stomach and intestinal ulcers, asthma, etc.) (Donaldson, 1996, Brown, 2004) results in unnecessary use of diagnostic facilities and creates substantial financial burden for society. (Chisholm, 2000, Whitlock, 2002)

All this studies (Boardman, 2004) as well as WHO World Health Report 2001 maintain that mental health services should be an integral part of primary care.

Mental health services, broadly defined, comprise a mix of health, social, vocational, recreational, and volunteer, occupational therapy, and educational services. They include a range of activities and objectives ranging from mental health promotion and the prevention of mental health problems to the treatment of acute psychiatric disorders and the support and rehabilitation of persons with severe and persistent psychiatric disorders and disabilities. (American Psychiatric Association, 1994)

There are different approaches and systems developed and discussed for effective integration of mental health services in primary care. (Doherty, 1996, Meadows, 1998, Anderson, 2000, Mauer, 2004, Ludy, 2005) The need for improved co-ordination of care was recognized among health professionals (Starfield., 1998, Gask 2005). Integrated care was defined (Donoldson, Yorby, Lohr, & Vanselov, 1996) as not simply “coordinated” (ensuring the provision of combination of health services and information that meets patients’ needs and also involving the connection between these services (Gask,2005)) but also “comprehensive”(addressing any health problem at any given stage of patient’s life cycle (Gask , 2005)) and “continues” (care over time by a single individual or team of individuals and effective and timely communication (Gask,2005) ). The definition of “coordination” is “the act of arranging according to a plan essentiality one drawing together a number of different events, organizations, people etc.” and “working together smoothly in combination”. (Batterham et al. 2002)

The concept of “integration” is described as “collaboration between psychosocial providers and biomedical providers as indicative of the need to integrate completely within the primary care team.” (Gask, 2005)

There are different models of integration of mental health care delivery, accepted worldwide. (Gask, 2005, Mauer, 2004, Druss, 2002, Mechanic, 1997, William, 1996, and many others) For example, in US Coleman and Patric (1976) described three main models, which can be utilized currently in developing countries: first, the primary care practitioners receive limited specialty mental health training; second, specialty mental health practitioners consult with primary care practitioners on a case-to-case basis; third, mental health practitioners serve as a part of the primary care team. Later, Seaburn, Lorenze, Gunn, Gawinsky, and Mauksch (1996) describe five bands of the collaborative care, which are the following: parallel delivery, informal consultation, and formal consultation, co-provision of



care and expansion of health network. In summary, the common purpose of all models designed for mental health care integration in primary care is clear communication, and preferably, co-location. (Gask, 2005)

Armenia, currently, is practicing the centralized inpatient system of mental health care. There are six specialized hospitals that provide psychotherapeutic care (both day care and inpatient care): the “Nork” Republican Mental Health Center (MHC), Yerevan City Neuro-Psychiatric Dispensary, Nubarashen Republican Psychiatric Hospital, ”Stress” Mental Health Center, Republican Hospital of Neurosis and other Borderline Conditions, Psychiatric Hospital of Vardenis. (Soghoyan, 2003) The activity of these hospitals is mainly oriented to severe mental health disorders.

### **Magnitude of the problem**

Currently 450 million people suffer from mental and behavioral disorders. (WHO 2001) One of the best ways to measure the global burden of mental diseases may be disability-adjusted life years (DALYs) which measures overall burden of disease combining, on the one hand, the years of potential life lost due to premature death from the disease and on the other hand the years of productive life lost due to disability caused by conditions. (Bruthland, 1999) According to this measure, it is estimated that mental health disorders accounted for about 12 – 15 percent of total disability in the world in 2001. This figure is twice the level of disability caused by all forms of cancer, and higher than that caused by cardiovascular diseases. (Andrews, 2001) Considering the disability component alone, without mortality, neuropsychiatric disorders account for more than 30 percent of all years lived with disability worldwide. (Kessler, 2005) It is projected that in 2020 mental and neurological disorders will account for 15 percent of the deaths and lost productivity due to all disease and injuries globally. (WHO, 2001) The distribution of specific mental health disorders prevalence among male and female is presented in Table 1. (See Annex 1)

In Armenia morbidity of population caused by mental health disorders is presented as 47.9 per 100 000 population, number of sick people with the diagnosis set for the first time is equaled to 1538. (Statistical Manual Online 2004) The dynamic of prevalence over the years 1999 to 2003 is presented in Graph 1 (see Annex 2.). The rates might be significantly underestimated because of stigmatization of mental disorders and limitations of health statistics surveillance system in Armenia. (Van Baelen, & Theochartopolus, 2005) Also, traditional measures of disease burden such as morbidity and mortality had some limitations. (Rozov, 1999) The number of deaths did not take into consideration the nonfatal cases of illness, while prevalence rates did not take into account the severity and duration of disability produced by disease. (Rozov, 1999) As a result, for many years the burden of psychiatric and neurological conditions has been underestimated in many countries. This results in inappropriate budget allocation and policy planning. (Rozov, 1999, Chisholm, 2000).

The other important issue emphasized by WHO are treatment rates of mental health conditions. For example, even in the established market economies with well-developed health care systems, only an estimated 35 percent of patients who suffer from depression receive treatment. (Boardman, 2004, Kessler, 2005) The situation is especially worrisome in developing countries, which will account for 80 percent of the world's population by 2020. In India treatment rates for schizophrenia and epilepsy are 20 percent over 80 percent in developed countries. In Saharan Africa treatment rates of depression are around 5 percent. (Rozov, 1999)

Most of mental health disorders such as non-specific depressive symptoms, adjustment disorders or other neurotic disorders of mild or moderate severity are seen in primary care. (Boardman, 2004). Nevertheless, it is also known that in practice these factors often remain unidentified, misidentified, or under treated in standard practice, resulting in ineffective treatment. A critical challenge for health care, therefore, will be to integrate new

psychological and behavioral medicine knowledge and practice in clinically relevant ways into primary health care. (Dea, 2000, Upshur, 2005) The WHO report maintains that in low-income countries with specialist backup it is feasible to integrate essential mental health treatments in primary health care systems. (WHO, 2001)

According to the head of Department of Health and Social Welfare of Yerevan Municipality, Armen Soghoyan (Soghoyan A., 2003) there are several problems persisting in the field of mental health care. The financial funds of the state are insufficient even to cover the expenses of the existing psychiatric hospitals. Professionals don't have sufficient training and knowledge of new treatment methodologies and modern medications, which results in unnecessary long stay of patients. Outpatient care (primary care) is poorly developed due to lack of funds, psychiatrists and psychologists and absence of social workers, resulting in more inpatient admissions.

In general, primary care providers are polyclinics and ambulances. Ten of the 33 polyclinics of Yerevan have an office providing psychiatric and psychological services. These services are not financed by the State Health Agency and patients do have to pay themselves. Also, they are far from the idea of integrated services – cooperation of medical practitioners and mental health services providers. (Soghoyan A., 2003)

### **Research objective**

As it was maintained in WHO World Health Report and emphasized by governmental authorities of Armenia (Soghoyan A, 2003), it is important to strengthen the primary care level for prevention and early detection of mental health and neurological disorders, broader access to mental health care, improved communication among healthcare providers and opportunity for mutual teaching and learning. (Washington Community Mental Health Council, 2002)

Since this type of approach to mental health care is new for Armenia, and it requires policy change, there is a need for preliminary assessment of potential readiness of participating sides: general practitioners, mental health providers, governmental authorities and care users to collaborate in care provision and services integration strategy development.

Since primary care facilities (policlinics) are recognized as first link between patients and specialized care, it is essential to identify and understand factors associated with perceived need for collaboration between primary care providers (general practitioners) and mental health professionals.

Given the context, the **objective** of the research is to explore medical practitioners' attitude toward the integration of mental health care to primary care, and their practice with patients with mental health disorders.

The guiding research questions of the research were:

- How often do Medical practitioners meet patients with any type of mental health disorder in their practice? (Practice oriented question)
- What are their actions when they suspect a mental health disorder/ problem in their patient? (Practice oriented question)
- What are general practitioners' perceptions of need for more training in mental health?
- What are general practitioners' perceptions of usefulness of integration of a mental health professional in primary care facility for their patients?
- What is general practitioner's opinion about possible obstacles (if any) to integrate a mental health professional in primary health care?

Since the nature of the research question is exploratory, and there is little known about general practitioners' attitude toward mental health services integration in primary care, the most appropriate study design is qualitative descriptive study. (Needleman, 1996)

## **Method and materials**

### Study settings

The study was conducted in two settings: polyclinic number 6 and 17. All clients of these polyclinics are adults. The polyclinic number 6 was selected as one of the largest polyclinic, which supplies over 87,000 population from which 58,438 is adult population. The second setting supplies 42,379 population from which 33,158 is adult population. The main reason for selecting polyclinic number 17 was identified considering one main basis: this polyclinic is currently reorganized in family medicine center. This trend in primary care is new for Armenia. Medical practitioners and pediatricians are taking six-month training in family medicine. This training might influence their perception of health and priorities given to mental health as an essential part of human well-being.

Both polyclinics are officially mentioned to have a mental health professional (psychiatrist) in their staff, but de facto these polyclinics had previous experience with a mental health professional, working on their site. Currently none of them have a mental health professional engaged in their practice.

### Study population

The study population included 20 general practitioners: 10 from polyclinic number 17 and 10 from polyclinic number 6 in Yerevan, Armenia. The in-depth interviews were conducted with general practitioners, who met following criteria: working in primary health care setting and having at least two years working experience in the same field. All participants were functioning as medical practitioners in different districts surrounding polyclinics.

## Sampling strategy

Participants were selected through non-probability purposive sampling. All of selected participants agreed to participate. None of them was familiar with the investigator. Investigator introduced herself as independent and did not mention her background in mental health in order not to bias the opinion of medical practitioners about mental health services and mental health issues.

## Instrument

Data were collected in the period of July 9, 2005 - August 10, 2005 through face-to-face interviews with health care providers (general practitioners) and administrators of polyclinics. All in-depth interviews were conducted in polyclinics, which is natural working environment for general practitioners. The semi structured interview format with open-ended questions was considered. Interview guide for interviews with medical practitioners was used (See Annex 3.) and accomplished with detail-oriented, elaboration and clarification probes. Interview guide was translated into Armenian and pre-tested. Interviews were conducted in Armenian. The field guide consisted of questions on medical practitioners' attitudes towards mental health services integration into primary care units, and practice with regard to patients with mental health disorders. The field notes were taken, expanded and translated into English the same day when the interview was conducted in order to avoid recall bias.

## **Ethical considerations**

The study was reviewed and approved by the Institutional Review Board of Committee on Human Research of the University of Armenia. The study posed minimal risk on study population. Study participants might come across with some inconvenience such as time spent on interview. The questions that were asked did not contain sensitive information and did not include personal information except service length. The oral consent form was presented to all participants (see Annex 4). All data will be anonymous; information will not

be associated with any personal information, except place of work. The transcripts of interviews will be stored in data entry room of Center of Health Services Research (CHSR) for five years and then destroyed.

### **Data analysis**

Data acquired from the interviews with medical practitioners were divided into main domains. Under the all domains, the certain answers of medical practitioners were coded (see Annex 5) and later used for identification of main ideas expressed by interviewees. The technique of domain analysis was used. The taxonomic diagrams were drawn for main domains (see Annex 6, 7, 8).

Presenting summary of all interviews to two representatives of medical practitioners validated the reliability of the data collected during in-depth interviews. The summaries were evaluated by medical practitioners as reflecting their own opinion about mental health services integration in primary care.

### **Results**

#### Characteristics of study population

The mean length of service as general practitioner for participants from polyclinic number 6 was 28 years, and mean length of service for participants from family medicine center (polyclinic number 17) was 12.5. All of them were residents of Yerevan. All medical practitioners were female.

#### In-depth interviews with general practitioners

#### *Occurrence of patients with mental health disorders in primary care*

Almost all medical practitioners report that there are a lot of patients who require mental health care or psychological counseling. Most of them mentioned that all somatic patients with any type of physical disorder need psychological support as well.

*“All of my patients need psychological help, help from a mental health professional.”*

*“I would tell you that from my experience I have learnt that all disorders start in mind, in psychological condition. If you can improve his or her mental state you can treat physical illness. It is not the hunger that makes person sick, but the thought about hunger. ”*

*“If you are a doctor from God, you should first identify the personality of the patient: who he is, what he is concerned about, and then you can treat his body.”*

Some medical practitioners mentioned that all of their patients need psychosocial support and some of them even need professional mental health treatment. Many of interviewee mentioned that cases of mental health problems and disorders become more frequent in recent two years. Also, they mentioned that cases become younger than it was in past.

*“...You know, I had not met so many cases of mental health problems before. During past two years they become very frequent, and most of patients are young people 20–25 years old. It is surprising for me.”*

Socioeconomic factor was mentioned several times as predisposing for mental health disorders and psychological problems.

*“I see many patients with mental health problems, most of them are from socially vulnerable groups.”*

*GP-s practice of referral of mental health patients to specialized mental health services*

The majority of medical practitioners reported that they do not refer patients with mental health problems to specialized care and deal with patient by their own.

*“I do not refer my patients with mental health problems to psychologist or psychiatrist. I talk with them. During my practice I get used to talk with patients. ”*



There is a range of reasons mentioned by medical practitioners for not referring patients to a mental health professional: stigma, financial burden on patient's family and lack of information about mental health services.

Most of interviewee mentioned that they would refer their patient to a mental health professional only in case of severe mental disorder.

#### *Willingness of medical practitioners to increase their knowledge in the field of mental health*

All participants expressed interest and willingness to participate in mental health training. They mentioned that this knowledge would be very useful for their everyday practice and would help them to diagnose and correctly refer patients with mental health and neurological disorders. Particularly those who undergo training for family medicine and who are working as a family physician mentioned that the improved knowledge of mental health area will help them to deal with all family members and to be aware of possible problems that might arise in their practice.

*“Since we had not this type of training during our study in Medical University, I feel strong need for this type of training (mental health training).”*

*“...It (mental health training) is not just useful- it is necessary. I have a lot of patients like this (patients with mental health disorders).”*

#### *Previous working experience with a mental health professional*

In both study settings medical practitioners had some previous experience of collaboration with a mental health professional.

In polyclinic number 6 a mental health professional was presented on consulting basis. Most of physicians mentioned that sporadic visits of a mental health worker are not enough for efficient and effective collaboration, and are not of use for patients.

*“I would like to contact with a mental health professional more than once a week. I have a lot of patients to consult about, and I want to have closer contact with him (a mental health professional).”*

In polyclinic number 17 (family medicine center) the psychologist worked on the private basis. Interviewees mentioned that though it was convenient, that a mental health professional was collocated, but the expenses for consultation were too high, which caused financial burden on patients, and moral burden of primary care providers, who were not confident with patients' referral.

*“The position of a mental health provider should be regulated by some governmental policy. I cannot tell my patients that they should consult with psychologist and pay for it. Most of them just will not apply. ”*

#### *Perceived benefits from integration of mental health services in primary care*

Most of respondents mentioned importance of collaboration with mental health team. They mentioned necessity of professional help for their patients. Also they mentioned that the accessibility of mental health services would increase if the mental health professional will be located in the same setting. The other important note that Medical practitioners made is that location of the mental health professional on the basis of primary care facility will increase referral, decrease stigmatization and save time of both patients and general practitioners.

*“It is very important (integration of mental services in primary care); I am surprised why we are still working without mental health professionals in our team. Our patients are reluctant to apply to a mental health professional. They think that it is something shameful. But if psychologist or psychiatric t is here in polyclinic- they will apply easily, like they apply to us (general practitioners).”*

The need for collaboration with a mental health professional was particularly emphasized in case of patients with somatic presentation of their emotional problems, since

they are unlikely to directly apply to mental health. Medical practitioners think that collaboration with a mental health professional will increase early detection and more effective treatment not only mental but also physical health problems presented by their patients, and thus increase efficient care and patients' satisfaction.

*Perceived obstacles for integration of mental health services in primary care*

Most of interviewees expressed their concern about additional payments to be made for consultation with a mental health professional. Most of them had an experience working with psychiatrist or psychologist in the same setting, but since government did not support the position of a mental health specialist, it caused financial burden for patients.

*“You know, my patients come from poor environment. I can't tell them to go and visit a mental health professional - it is too costly for them.”*

Some medical practitioners consider that only one reason is responsible for absence of a mental health professional in their setting: absence of governmental regulation (policy).

*“I think, the Ministry of Health is supposed to take care of it (integration of mental health services). There is no rate for a mental health professional in polyclinic.”*

*“...If we (general practitioners) express interest in collaboration with a mental health professional, I think Ministry of Health would agree to change the policy. But, you know, we are so reluctant to change something, even if it is useful for us...”*

The other consideration expressed by participants was stigmatization of mental health disorders in Armenia and reluctance of patients to apply for mental health services.

*“... I think it is useful (to have mental health professional working in polyclinic), but only one in hundred patients will apply. They are afraid of words “psychologist”, “psychiatrist”.”*

*“...If you tell them (patients): “You need to talk with ? mental health professional”, they become angry. “I am not mad, I am not crazy,” they tell.”*

The issue of confidentiality (which is highly related to stigma) was also discussed as one of the obstacles for integration of mental health services in polyclinics.

*“My patients come from the same district. They might meet each other in polyclinic in front of the mental health professional’s room. They cannot feel safe. Also, a mental health professional might share his opinion (about condition of patient) with us (general practitioners). So, patients do not feel comfortable to apply for help.”*

Medical practitioners suggested, that first of all it is important to educate population about mental health and to fight stigma, which is present in Armenian society.

### **Discussion**

The qualitative study analysis has shown that most of medical practitioners perceive mental health problems to be common for primary care setting. They agree that most of their patients require professional help, but in some cases they are reluctant to refer their patients to appropriate setting. Also, some of them think that they can help their patients by talking with them and there is no necessity in referring patient to a mental health professional. This kind of approach might be a result of lack of information and additional training in mental health. Among some of medical practitioners mental health issues are not perceived to be as critical for patients’ well-being as physical disorders. Also, most of them are not familiar with professional mental health services. They express concerns about possible obstacles for integration of a mental health professional in primary care, but they perceive only external obstacles, such as reluctance of patients to visit a mental health professional, stigmatization of financial burden and absence of policy. None of them mentioned any obstacles, reflecting their negative or neglecting attitude.

Comparing recent studies conducted in assessment of integration of mental health services and opinions of medical practitioners about cooperation with mental health professionals (Lucena, 2005, Rees, 2005, Younes, 2005, Gask, 005) there are many

similarities in perceptions and problems, mentioned by medical practitioners abroad and in Armenia as well.

Summarizing key points of in-depth interviews results, most of medical practitioners are ready to collaborate with a mental health professional and perceive need for professional consultation for their patients. Lack of contact and opportunities for inter-professional communication makes it difficult for medical practitioners to challenge their attitudes to mental health professionals, and to understand the nature of the task of dealing with mental health problems.

In general, the opinion of medical practitioners about mental health issues is highly influenced by neglecting attitude of governmental structures towards mental health as an important public health problem. Lack of information about mental health services, their role in overall well-being of populations is stipulating from absence of special training, lack of trained a mental health professional and absence of policy regulation in mental health care provision.

Yet, most of medical practitioners perceive high need for professional approach to mental health problems seen in primary care, and emphasize the necessity of cooperation with mental health representatives.

The current troublesome mental health situation in Armenia could be substantially improved when the right solutions are suggested in incorporated in mental health policy change strategy. There are a lot of steps to be taken for a successful mental health care reform. A strongly felt need for mental health care in the population, and in primary care providers is essential for policy change and prioritization of mental health as an important public health issue. One of these components - understanding of mental health importance for population well-being among outpatient care providers already exists. It is also important to have a clear political will to give priority to mental health, and availability of

international funding agencies for significant investments in restructuring the health care system.

### **Limitations**

The main limitation of this study, stipulated from its descriptive qualitative design, is lack of comparability and generalizability of obtained results. However, the objective of the study was to obtain deeper information about attitudes of medical practitioners about mental health integration in primary care. This objective does not employ methods of statistical estimates.

Another limitation is reliability of reported practice with mental health patients, their referral and issue of addressing their problems during general visits. Some of Medical practitioners might report behavior which is appropriate in their opinion and which is perceived to be “right” but not one, that is actually practiced. To eliminate the impact of subjective perception of “right” and “wrong” answers the summary of interviews was prepared and presented to physicians, who were the participants of the study.

Another issue to be addressed is the researcher (interviewer) bias. Data collection and data analyses might be occasionally influenced by perceptions and beliefs of investigator, since only one person was involved in all steps of data management.

The credibility of study results might be affected by translation from Armenian into English. The translation might change specific meaning of some definitions and terms, or distort some culturally-related ideas, expressed by interviewees.

### **Recommendations**

Based on literature review and qualitative data collected there are several recommendations made to improve mental health care and to promote idea of integration of mental health services integration in primary care.

1. To initiate research on mental health perception and attitude, as well as improve epidemiological data report and surveillance system to facilitate policymaking. The potential research spheres might address community member's attitudes and perception of mental health problems, qualitative data collection on medical practitioners' attitudes towards mental health services and perceived problems for integration of mental health care in outpatient facilities. Baseline information epidemiological data of prevalence figures in primary care attendees and help-seeking patterns in population will provide basis for a new mental health policy.
2. To reform the curricula in medical faculties and nursing schools that presently do not properly address mental health issues and need to be revised and shifted towards a public mental health approach.
3. To develop methodologies and models for integration of mental health into the Armenian basic health care system. This time of programs might be conducted by Non Governmental Organizations (NGOs) and include some aspects of research, sensitising the medical staff in the region with regards to mental health issues and training courses for Armenian primary health care physicians in basic mental health issues including prevention, diagnosis, and appropriate referral.
4. To carefully monitor and evaluate each intervention programme with clear outcome measures so that effectiveness - or lack of it - can be recognized. After establishing various programmes the cost-effectiveness needs to be studied and compared. Recent studies (Chisholm, 2000, Ventevogel, 2005) prove that also in low-income countries cost-effectiveness-studies of primary mental health interventions are feasible.
5. The results of this study might be used to develop questionnaire and to conduct quantitative study to obtain more sound and generalizable results.

## Reference

1. A primary care guide to mental health integration. (2004) *Intermountain Health Care Clinical Education Services*.
2. American Psychiatric Association, (1994). Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition). *Washington, DC*
3. Anderson, A. (2000). Sectorization and Sub-sectorization of Mental Health Services in Developing Countries. *International Journal of Psychosocial Rehabilitation*. 4, pp.107-109.
4. Andrews, G., Henderson, S., Hall, W. (2001) Prevalence, comorbidity, disability and service utilization. Overview of the Australian National Mental Health Survey. *Br J Psychiatry* pp.145–153
5. Batterham, R., Southern, N., Appleby, N., Elsworth, G., Fabris, S., Dunt, D. and Yound, D. (2002) Construction of a GP integration model, *Social Science & Medicine* pp. 1225–1241.
6. Boardman, J., Henshaw, C., Willmott, S. (2004). Needs for mental health treatment among general practice attenders. *Br J Psychiatry*, pp. 318-327.
7. Brown, J. (2004). Psychological mechanisms of medically unexplained symptoms: an integrative conceptual model. *Psychol. Bull.* ,pp. 793-812
8. Chisholm, D., Sekar, K., Kumar, K., Saeed, K., James, S., Mubbashar, M., Murthy, S. (2000) Integration of mental health care into primary care: Demonstration cost-outcome study in India and Pakistan. *Br Journal of Psychiatry*.
9. Coleman J., Patrick D. (1976) Integrating mental health services into primary medical care. *Medical Care* (8), pp. 654–661.
10. Dea R. (2000) The integration of primary care and behavioural healthcare in Northern California Kaiser-Permanente, *Psychiatric Quarterly* pp. 17–29.
11. Des Jarlais, R., Eisenberg, L., Good. B., and Kleinman, A. (1995) World Mental Health: Problems and Priorities in Low-Income Countries. *Oxford University Press*.
12. Doherty, W., McDaniel, S., Baird, M., (1996) Five levels of primary care/behavioral healthcare collaboration. *Behavioral Healthcare Tomorrow*, 25-28
13. Donaldson, M., Yordy, K., Lohr, K., and Vanselow, N., (1996) Primary Care: America's Health in a New Era. *Committee on the Future of Primary Care, Institute of Medicine*.
14. Druss, B. (2002) The mental health/primary care interface in the United States: History, structure and context, *General Hospital Psychiatry* .pp. 197–202.
15. Gask, L. (2005) Overt and covert barriers to the integration of primary and specialist mental health care. *National Primary Care Research and Development Center, University of Manchester, Manchester M13 9DL, UK*
16. Guiding principles for integration: mental health and primary care. (2002) Washington community mental health council. [www.wcmhcnet.org/StaticContent/1/Resources/WCMHCGuidingPrinciples.htm](http://www.wcmhcnet.org/StaticContent/1/Resources/WCMHCGuidingPrinciples.htm)
17. Kessler, R., Demler, O., Frank, R., Olfson, M., Pincus, H., Walters, E., Wang, P., Zaslavsky, M. (2005) Prevalence and treatment of mental disorders, 1990 to 2003. *Department of Health Care Policy, Harvard Medical School, Boston, MA 02115, USA*.
18. Ludy T. Benjamin, Jr. (2005) A history of clinical psychology as a profession in America (and a glimpse at its future). *Annual Review of Clinical Psychology* Vol. 1: 1-30
19. Lucena R., Lesage A. Family physicians and psychiatrists : qualitative study of physicians' views on collaboration . *Canadian Family Physician* Vol. 48

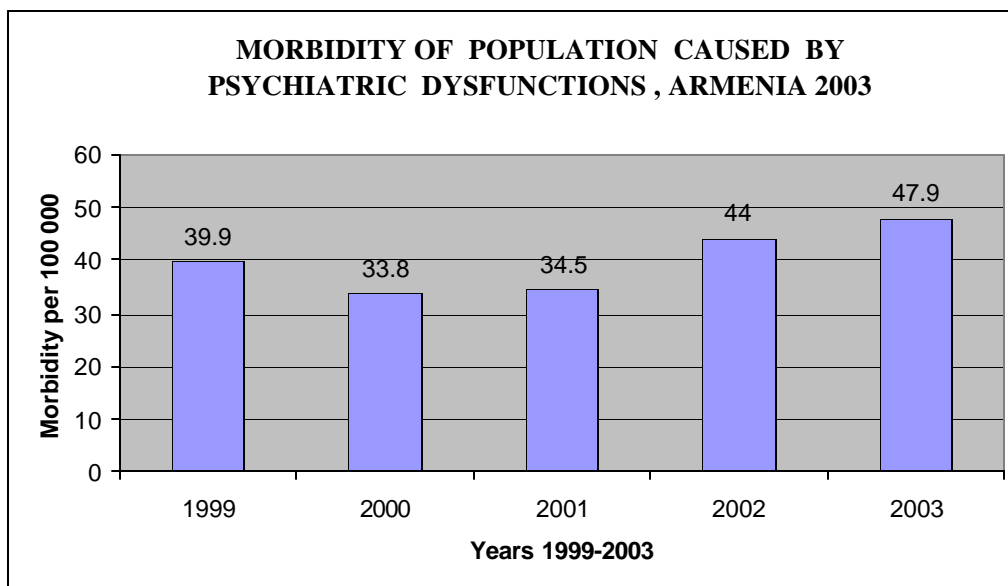


20. Mauer, B.(2004) Behavioral health/primary care integration the four quadrant model and evidence- based practices. *National Council for Community Behavioral Healthcare*
21. Meadows, G. (1998) Establishing a collaborative service model for primary mental health care, *Medical Journal of Australia* pp. 162–165
22. Needleman, C., Needleman, M.,(1996) Qualitative Method for Intervention Research. *American Journal of Industrial Medicine* 29:pp.329-337
23. Nolan, P., Orford, J., White, A., Smith J.,(2004). Professional views on managing common mental health problems in primary care. *Primary Care Mental Health* , Vol. 1 , pp.27 – 36
24. Plsek, P., Greenhalgh, T. (2001) The importance of complexity in health care, *British Medical Journal* pp. 625–628.
25. Rees, G., Huby, G., McDade, L., McKechnie, L. (2005). Joint working in community mental health teams: implementation of an integrated care pathway. *Health and Social Care in the Community* (527–536)
26. Report of a surgeon general's working meeting on the integration of mental health services and primary health care.(2000)<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.2975>
27. Rozov, I. (1999) Raising awareness, fighting stigma, improving care: Brundtland unveils new WHO global strategies for mental health, sees poverty as a major obstacle to mental well-being. *WHO Press Releases*. <http://www.who.ch/>
28. Seaburn, A., Lorenz, A., Gunn,W., Gawinski, B., Mauksch, L. (1996) Model of collaboration: A guide for mental health professionals working with health care practitioners, *Basic Books, New York*.
29. Soghoyan, A.(2003) Psychiatric care in Yerevan. *Mental Health Reforms* vol.1 pp. 16- 19
30. Statistical manual online (2004). Armenia; [www.armstat.am](http://www.armstat.am)
31. Upshur, C.(2005) Crossing the divide: primary care and mental health integration. *Adm Policy Ment Health* . 32(4):341-55.
32. Van Baelen, L.,Teocharopolous, Y., Hargreaves, S.,(2005) Mental health problems in Armenia: low demand, high needs. *British Journal of General Practice* pp.64-65
- 33.Ventevogel,P., Azimi,S., Jalal, S., Kortmann.,F.(2005) Mental health care reform in Afghanistan. *HealthNet International, Jalalabad, Afghanistan*
34. Wetherell, J., Kaplan, M., Kallenberg, G., Dresselhaus, T., Sieber, W., Lang, A. (2004) Mental health treatment preferences of older and younger primary care patients. *Int J Psychiatry Med.*; 34(3): pp.219-33.
35. Whitlock, E., Orleans, T., Pender, N., Allan, J., (2002). Evaluating primary Care Behavioral Counseling Interventions: an evidence-based Approach. *Am J Prev Med*;22(4):267-84.
36. World Health Organization (2001) *World Health Report: Mental Health: New Understanding, New Hope*.
37. Younes, N., Gasquet, I., Gaudebout, P., Chaillet, C., Kovess, V., Falissard, B., and Hardy Bayle, M. (2005) General Practitioners' opinions on their practice in mental health and their collaboration with mental health professionals. *BMC Fam Pract*.18

**Annex 1. Table 1. Prevalence of mental disorders in men and women according to WHO (rates per 1000) Year 2004**

	<b>Men</b>	<b>Women</b>	<b>Total</b>
<b>All neurosis</b>	135	194	164
Mixed anxiety and depression	68	108	88
Generalized anxiety	43	46	44
Depression	23	28	26
Phobias	13	22	18
Obsessive-compulsive disorder	9	13	11
Panic	7	7	7
<b>Personality disorder</b>	54	34	44
Obsessive compulsive	26	13	19

**Annex 2. Graph 1. Morbidity of population caused by psychiatric dysfunctions,  
(rates per 100 000) Armenia 1999-2003**



### **Annex 3. In –depth Interview Guide Outline**

Interview with general practitioner

1. Warming questions (consent form presented)
2. How often do you meet in your practice patients with any type of mental health disorder?
3. What are your actions when you suspect a mental health disorder/ problem in your patient?
4. In your opinion, do you need more training in mental health?
5. What do you think, is it useful for your patients to integrate mental health professional/ clinical psychologist in primary care facility?
6. In your opinion, what are the possible obstacles (if any) to mental health services in primary health care?

#### **Annex 4. General Disclosure Statement**

Hello, my name is Marietta. I am MPH student at the American University of Armenia (AUA). AUA conduct a research project to identify possible ways for operation of mental health services in primary health care.

The information that you will share will be used only in this project. It will not be published or publicly disclosed and will not be associated with your personal data. Every effort will be made to provide confidentiality and protect the information you give. You are not required to participate in this interview. You will have monetary or other benefits from participation in this study.

Any benefits or risks are not associated with the interview.

If you agree to participate, the interview/ focus group discussion will take about 45-60 minutes. It will be recorded for further analyses. You can feel free to express any opinion. If you wish to stop at any time during the interview, please inform us and we will not continue.

It will not result in any undesirable situation.

If you have any questions related to our project, please do not hesitate to contact Grace Sullivan, PhD, Associate Dean, CHS/Assistant Director, CHSR

AUA, room 47

Tel. (3741) 51 25 70

Thanks in advance for your participation.

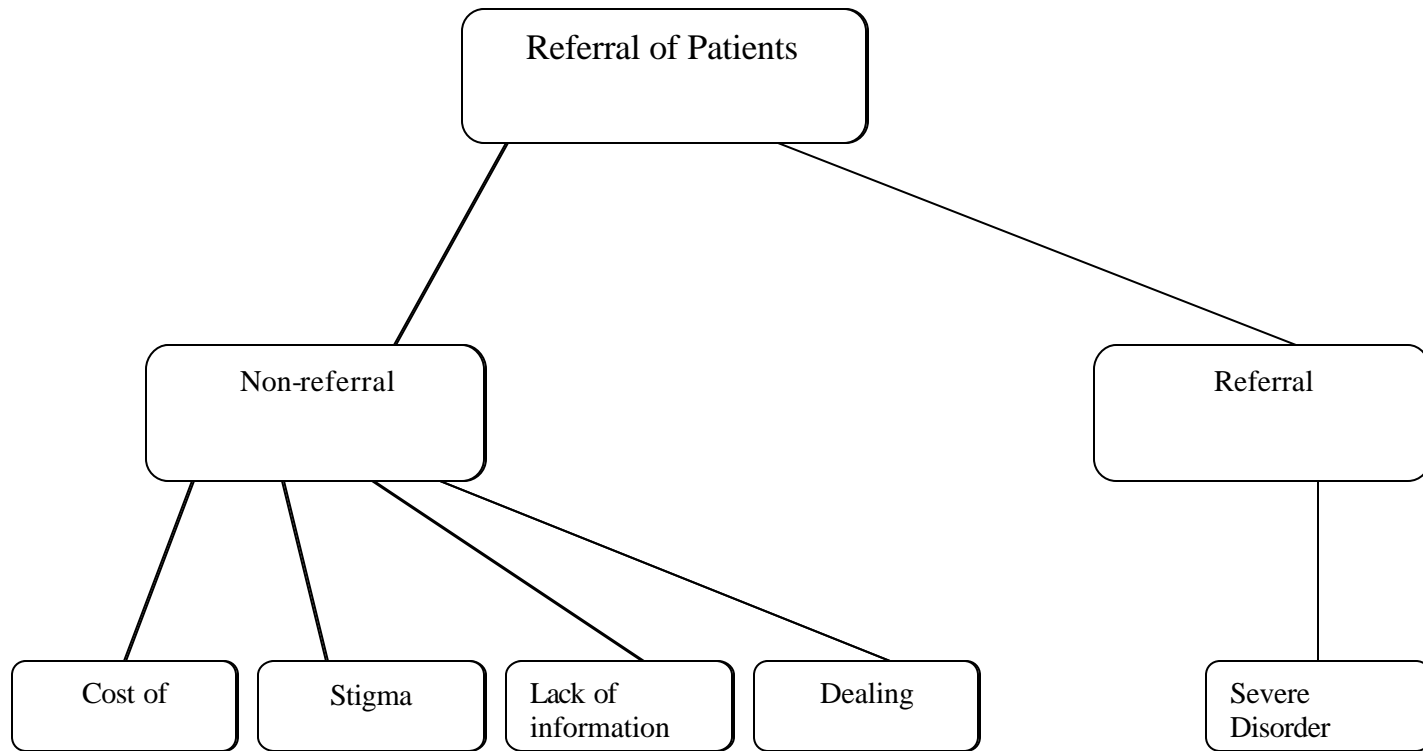
Signature of Interviewer \_\_\_\_\_

Date \_\_\_\_\_

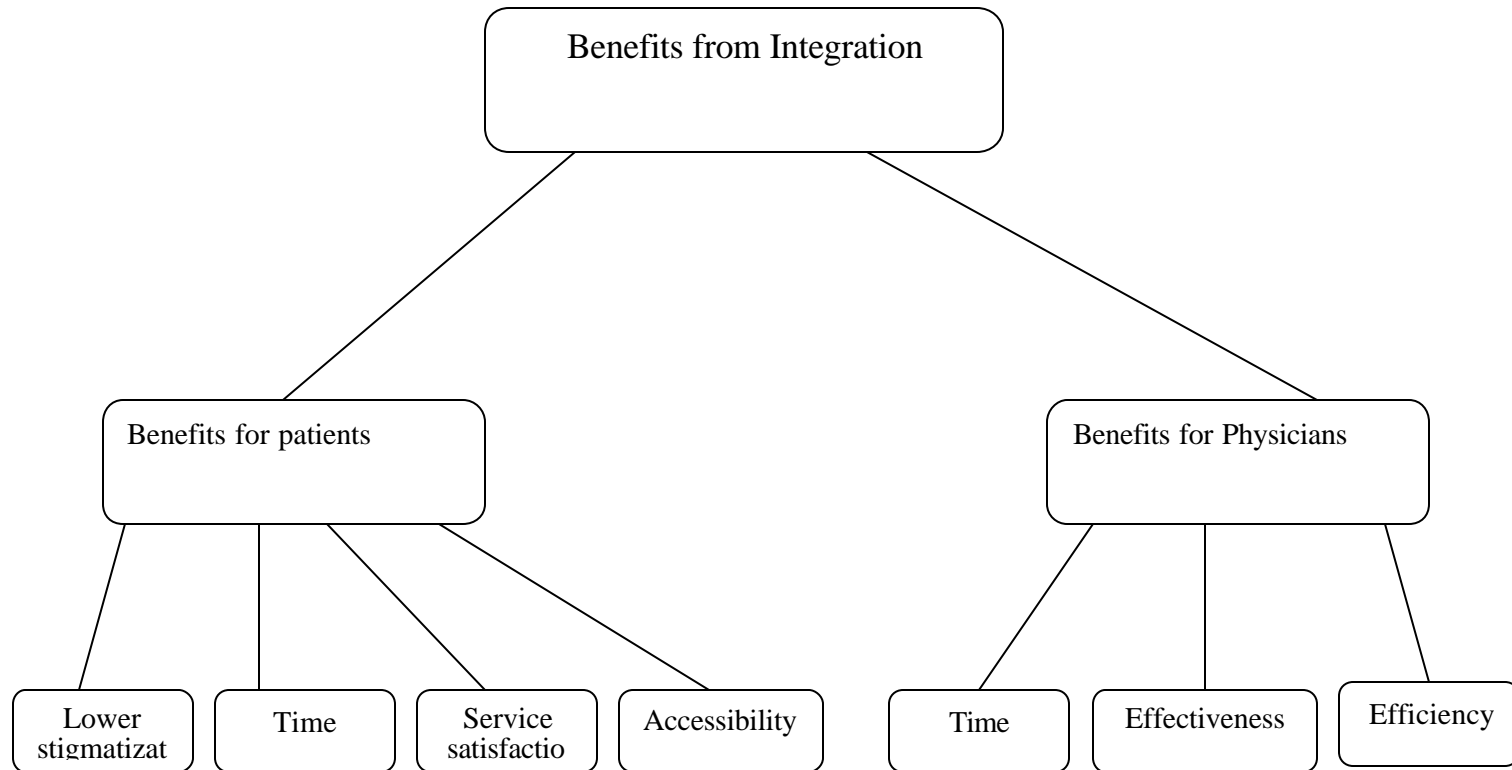
## Annex 5.Coding System

Code: long form	Code: short form	When to use
High Occurrence	HO	The occurrence of patients with mental health problems reported by general practitioner is high.
Not Significant Occurrence	NSO	The occurrence of patients with mental health problems reported by general practitioner is not significant.
Psychological Approach for All Patients	PAAP	All patients seen in primary care reported to have a need for psychological approach.
Cases more frequent during past two years	CF	The cases of patients with mental health problems seen by Medical practitioners became more frequent during past two years.
Younger cases	YC	The cases of mental health disorders became younger than they were in past.
Cases from Low Income groups	CLI	Cases of mental health disorders seen in primary care are mainly from low income population
Referral	R	Medical practitioners refer their patents with mental health problem to mental health professional.
Not referral	NR	Medical practitioners do not refer their patents with mental health problem to mental health professional.
Psychological Help Provided by General Practitioner	PHGP	General practitioners, instead of professional help from mental health specialist, provide the psychological help.
Refer only severe cases	RSC	Medical practitioners refer their patents with mental health problem to mental health professional only in case of sever condition.
Stigma as a Reason for Not Referral	SNR	Stigmatization considered being main reason for not referral of patients to mental health professional.
Finances as a Reason for Not Referral	FNR	Financial burden considered being main reason for not referral of patients to mental health professional.
Lack f Information as a Reason for Not Referral	LINR	Lack of information about specialized mental health services considered being main reason for not referral of patients to mental health professional.
Training is Useful	TU	Training in the field of mental health perceived to be useful for general practitioner.
Training is Not Useful	TNU	Training in the field of mental health perceived to be not useful for general practitioner.
Integration is Useful	IU	Integration of mental health services in primary care perceived to be useful.
Integration is Not Useful	INU	Integration of mental health services in primary care perceived to be not useful.
Financial Obstacle	FO	Requirement to make additional payment for mental health services perceived to be main obstacle for mental health services integration.
Absence of Policy as an Obstacle	APO	Absence of policy requirement to have mental health professionals in primary care perceived to be main obstacle for mental health services integration.
Stigma as an Obstacle	SO	Stigmatization of mental health disorders perceived to be main obstacle for mental health services integration.
Confidentiality as an Obstacle	CO	Lack of confidentiality perceived to be main obstacle for mental health services integration.

**Annex 6.GP-s practice of referral of mental health patients to specialized mental health services.**



**Annex 7. Perceived benefits from integration of mental health services in primary care**





**Annex 8. Perceived obstacles for integration of mental health services in primary care.**

