Mental health surveillance and information systems

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ترصد الصحة النفسية ونُظُمُ المعلومات

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الخلاصة: إن نظم المعلومات الروتينية المتعلقة بالصحة النفسية في العديد من بلدان إقليم شرق المتوسط بدائية أو غير موجودة، مما يجعل من الصعب فهم احتياجات السكان المحليين والتخطيط وفقاً لذلك. إن المكونات الرئيسية لترصد الصحة النفسية ونظم المعلومات المتعلقة بها هي: التزام وقيادة وطنية للتأكد من جمع المعلومات ذات الصلة وتبليغها بصورة عالية الجودة، ووجود حد أدنى من البيانات المتعلقة بالمؤشرات الرئيسية للصحة النفسية، وتعاون بين القطاعات مع تبادل كافٍ للبيانات، وجمع روتيني للبيانات يُستكمل بمسوحات دورية، ومراقبة الجودة والحفاظ على سرية المعلومات، والتقنية والمهارات اللازمة لدعم جمع البيانات وتبادلها ونشرها. إن التدخلات الاستراتيجية ذات الأولوية تشمل: (1) التقييم الدوري لموارد وقدرات الصحة النفسية المتوفرة والإبلاغ عنها باستخدام منهجيات موحدة، (2) الجمع الروتيني للمعلومات والإبلاغ عن توافر الخدمات والتغطية والاستمرارية، بالنسبة للاضطرابات النفسية ذات الأولوية، مصنفة حسب السن والنوع والتشخيص، (3) التسجيل الإلزامي والإبلاغ عن حالات الانتحار على المستوى الوطني (باستخدام رموز التصنيف الدولي للأمراض ذات الصلة).

ABSTRACT Routine information systems for mental health in many Eastern Mediterranean Region countries are rudimentary or absent, making it difficult to understand the needs of local populations and to plan accordingly. Key components for mental health surveillance and information systems are: national commitment and leadership to ensure that relevant high quality information is collected and reported; a minimum data set of key mental health indicators; intersectoral collaboration with appropriate data sharing; routine data collection supplemented with periodic surveys; quality control and confidentiality; and technology and skills to support data collection, sharing and dissemination. Priority strategic interventions include: (1) periodically assessing and reporting the mental health resources and capacities available using standardized methodologies; (2) routine collection of information and reporting on service availability, coverage and continuity, for priority mental disorders disaggregated by age, sex and diagnosis; and (3) mandatory recording and reporting of suicides at the national level (using relevant *ICD* codes).

Systèmes d'information et de surveillances de la santé mentale

RÉSUMÉ Les systèmes d'information de routine pour la santé mentale dans de nombreux pays de la Région de la Méditerranée orientale sont rudimentaires ou font défaut, ce qui rend difficile la compréhension des besoins des populations locales et la planification correspondante. Les composantes clés des systèmes d'information et de surveillance de la santé mentale sont les suivantes : un engagement et un rôle de premier plan à l'échelle nationale pour garantir que des données pertinentes et de haute qualité sont recueillies et transmises ; un ensemble de données minimales servant d'indicateurs clés pour la santé mentale ; une collaboration intersectorielle permettant le partage approprié des informations ; le recueil de données systématique complété par des enquêtes périodiques ; un contrôle qualité et la confidentialité ; et de la technologie et des compétences pour appuyer le recueil, le partage et la diffusion des données. Parmi les interventions stratégiques prioritaires, on peut citer : 1) l'évaluation périodique des ressources et des capacités en santé mentale disponibles et la notification de ces informations à l'aide de méthodologies normalisées ; 2) le recueil et la notification de données systématiques sur la disponibilité des services, leur couverture et leur pérennité pour les troubles de santé mentale prioritaires, ventilées par âge, sexe et diagnostic ; et 3) l'enregistrement et la notification obligatoires des suicides à l'échelle nationale (à l'aide des codes CIM pertinents).

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The case for mental health surveillance & information systems

Surveillance involves the collection, analysis and interpretation of health data and the timely communication of these data to policy-makers and others. The availability of relevant information enables actions to be monitored and improvements in service provision to be detected. Mental health information systems are vital for collecting, processing and analysing information about mental health determinants, needs, system responses and the impact of interventions. But it is also crucial that findings are communicated in a form that is accessible and useful to those who will utilize them. Only then can the mental health information system perform its functions of facilitating effective planning, budgeting, delivery and evaluation of mental health care. This information loop from data collection, through analysis and reporting to informed implementation of plans (Figure 1), needs to be driven by an infrastructure of training andt supervision of all staff involved, of quality assurance and of confidentiality. These activities require clear leadership to oversee and manage the process in its entirety.

Preliminary findings from the World Health Organization (WHO) *Mental health atlas* survey 2014 [in press] shows that more than one-third of Eastern Mediterranean Region (EMR) countries have not published a specific mental health information report in the past 2 years. Approximately half were unable to provide any financial information and less than one-sixth knew their total expenditure for mental health. About two-thirds of countries in the Region did not know the total number of staff in the mental health workforce. Although more than half could report the number of persons treated at mental hospitals, the great majority of countries were unable to report the number of persons with mental disorders who received care in mental health outpatients departments or in primary care facilities. About half of EMR countries had data on length of stay and involuntary admissions, but few reported on the proportion of persons discharged from hospital who had a follow-up visit within one month. Only one-quarter of EMR countries were able to report data on numbers of suicides. Suicide rates in EMR countries may be under-reported or even unreported for social, religious and cultural reasons. The difficulty in providing information for the *Mental health atlas*, particularly on expenditure on mental health care, number of professionals working in different settings, mental health service coverage and suicide data, suggests that many countries are managing with very rudimentary information systems, making it difficult for them to understand the needs of local populations and to plan accordingly.

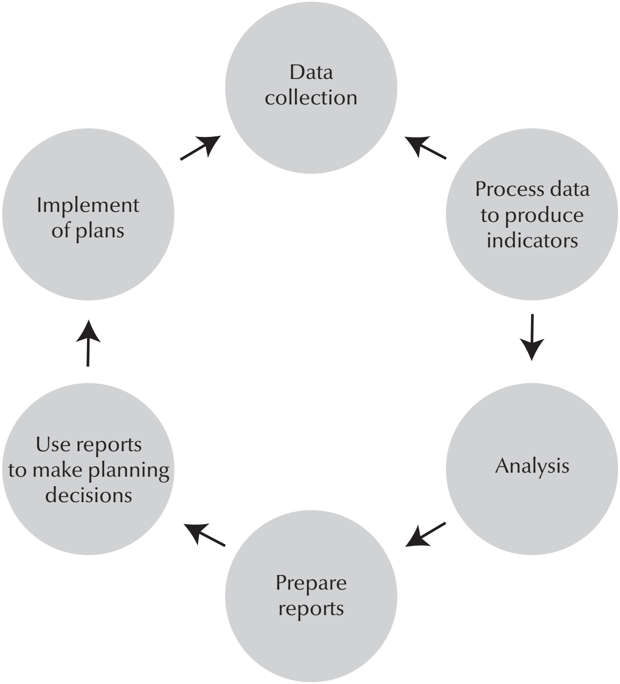

Figure 1 **Information loop of data collection**

What information is needed for mental health policy, planning and evaluation?

Collecting a small number of carefully selected indicators thoroughly and consistently over time (both within and across countries) is more effective than collecting a large number of indicators that are never implemented. The collected indicators should be meaningful to health planners, acceptable to stakeholders, valid, reliable, comparable over time and sensitive to change. They need to be disaggregated by sex and age and by other variables, in order to capture the diverse needs of subpopulations, including individuals from geographically diverse communities (for instance, urban versus rural) and vulnerable populations.

Three WHO sources—the Comprehensive Mental Health Action Plan 2013–20 (*1*); the EMR Regional Framework (*2*); and the WHO Mental Health Gap Action Programme (mhGAP) monitoring and evaluation tool kit (*3*)—can be used to identify a minimum data set for mental health. A set of indicators assembled from the Comprehensive Mental Health Action Plan and the EMR Regional Framework are included in Table 1.

How can information for mental health be generated?

Data relating to internationally agreed as well as locally determined mental health indicators can be collected routinely or periodically. Ideally, most of the data requirements should be generated on a routine basis via local information systems; for example, deaths attributable to suicide and self-harm should be recorded in vital registration systems, while cases of mental disorder receiving care and treatment should be identifiable through facility-based recording systems (see Box 1 for an example from Saudi Arabia).

In situations where routine health information systems may not yet be in place or functioning well, or where more periodic assessment may be sufficient (e.g. the compliance of local mental health legislation with international or regional human rights instruments), periodic but regular surveys can be used to monitor developments. For example, in

Table 1 Proposed mental health indicators for the Eastern Mediterranean Region

Periodic survey	Routine national HMIS	Routine national information system other than HMIS
• Country has an operational multisectoral national mental health policy/plan in line with international/regional human rights instruments. • Country has an updated national mental health legislation in line with international/regional human rights instruments. • Inclusion of specific priority to mental health conditions in basic packages of health care, of public and private insurance/reimbursement schemes. • Mental health and psychosocial support provision is integrated into the national emergency preparedness plans. • A proportion of mental health facilities are monitored annually to ensure protection of human rights of persons with mental conditions using quality and rights standards. • Functioning programmes of multisectoral mental health promotion and prevention in existence.	• Routine data and reports at national level available on a core set of mental health indicators. • Proportion of persons with mental health conditions utilizing health services (disaggregated by age, sex, diagnosis and setting). • Proportion of general hospitals which have mental health units including inpatient and outpatient units. • Proportion of PHC facilities having regular availability of essential psychotropic medicines. • Proportion of PHC facilities with at least one staff member trained to deliver non-pharmacological interventions. • Proportion of health-care workers trained in recognition and management of priority mental conditions during emergencies. • Proportion of community workers trained in early recognition and management of maternal depression and to provide early childhood care and development and parenting skills to mothers and families.	• Proportion of schools implementing the whole-school approach to promote life skills. • Annual reporting of national data on numbers of deaths by suicide.
• Financial resources: government health expenditure on mental health • Stakeholder involvement: participation of associations of persons with mental disorders and family members in service planning and development.	• Human resources: number of mental health workers. • Capacity building: number and proportion of primary care staff trained in mental health. • Service availability: number of mental health care facilities at different levels of service delivery. • Inpatient care: number and proportion of admissions for severe mental disorders to inpatient mental health facilities that a) exceed one year and b) are involuntary • Service continuity: number of persons with a severe mental disorder discharged from a mental or general hospital in the last year who were followed up within one month by community-based health services.	• Social support: number of persons with a severe mental disorder who receive disability payments or income support.

Based on the World Health Organization Comprehensive Mental Health Action Plan (1) and the Eastern Mediterranean Region Regional Framework (2); and additional mental health service development indicators identified by the WHO Secretariat.
PHC = primary health care; HMIS = health management information system.

order to measure current and increased service coverage for severe mental disorders—a core mental health indicator of the global Action Plan—many countries may consider carrying out a baseline and repeat survey of provider facilities in one or more defined geographical areas of the country.

Table 2 provides examples of expected data collection strategies and sources for a number of key mental health indicators.

How can information be used?

The information loop is completed when the information is presented in a meaningful way and it is used to inform service planning. In 2010 the regional report based on the WHO Assessment Instrument for Mental Health Systems (AIMS) found that 71% of countries had a formally defined list of mental health data items to collect, and 65% of countries had published the data; however, only 30% published the data with comments (5). In other words, although information was being collected, it was seldom analysed so that it could be used as a tool for action.

Traditionally, reporting has been in the form of printed statistical tables with a commentary, but Internet-based technology now offers the opportunity for information integrated from different sources to be disseminated rapidly to end-users in a relevant and interactive format at a local, national, regional or global level. The WHO Regional Office for the Eastern Mediterranean (EMRO) is currently engaged in developing a regional National Health Information Systems (NHIS) strategy and a set of core health indicators which countries should report to EMRO on a regular basis. The strategy anticipates that NHIS will be required to move to systems that are deployed on the Internet, and by design are integrated based on principles of data warehousing. This will enable the access of data from different sources, and facilitate circulation of accessible data.

Whatever reporting system is in place, it is important that policy-makers and service planners have the skills to interpret and apply the evidence from information systems; and that reporting is part of an ongoing dialogue with policy-makers and service planners, to ensure that information is relevant and presented in a useful format.

Key recommendations

1. Periodically assess and report the mental health resources and capacities available using standardized methodologies.

- Establish a national focus of expertise and leadership to implement the development, reporting and use of mental health surveillance and information involving collaboration between relevant service providers working in the field of mental health: ministries of health, university hospitals, psychiatric associations, private hospitals, nongovernmental organizations and key opinion leaders.
- Develop procedures, regulations and training to ensure that the processes of collecting, analysing, reporting and using data meet standards of quality and confidentiality.

2. Routinely collect information and report on service availability, coverage and continuity, for priority mental disorders disaggregated by age, sex and diagnosis.

- Develop or strengthen national mental health information systems incorporating the indicators in Table 1.
- Collaborate with the EMR regional strategy for NHIS strengthening to develop information systems that utilize web-based technologies and data warehousing to facilitate the integration of information. These will enable the access of data from different sectors and settings, and facilitate circulation of accessible data.

3. Record and report on deaths as a result of suicide at the national level (using the relevant *International classification of diseases* (ICD) X-codes).

Table 2 **Examples of expected data collection strategies and sources for a number of key mental health indicators**

Level	Indicators (examples)	Data source(s)/ collection methods
National	• Existence of mental health policy and laws • Mental health expenditure • Suicide rate • Civil society and stakeholder involvement	• Physical availability of policy or law • National health accounts • Vital registration system • Periodic survey
District	• Human resources for mental health • Mental health training for primary health-care workers • Availability of mental health services	• Health information system • Health information system • Health information system; periodic survey
Facility	• Hospital admissions (total, involuntary) • Follow-up rate (continuity of care)	• Health information system; facility records • Health information system; facility records
Individual	• Service uptake and use • Social and economic determinants	• Demographic and health survey; integrate items in information systems of other sectors, e.g. housing, education, employment, prisons

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