By the Mental Health and Poverty Project - Ghana Team.

Department of Psychiatry, University of Ghana Medical School/Ministry of Health Partner.
The Project. Information Systems are relevant all over the world for planning, monitoring and evaluation. In 2007, the mental health information system (MHIS) in Ghana was in a weak and deplorable state. This was one of the findings of a report on the state of mental health care undertaken by the Mental Health and Poverty Project (MHAPP). MHAPP therefore set out to strengthen the MHIS.

MHAPP: The Mental Health and Poverty Project is a research consortium in Ghana, South Africa, Zambia and Uganda dedicated to breaking the links between mental health and poverty. It is funded by the Department for International Development, DfID.

Why strengthen the MHIS?

As a result of this weak information system, there was inadequate empirical data for planning or advocacy which lead to

- over burdened hospitals, i.e., the patient /bed ratio of our three hospitals was over 100% at all times, indicating that there were more patients than beds. There were more patients needing services than the capacity of the hospitals could reasonably accommodate.
- A lack of qualified personnel,
- medication shortages,
- abuse of the rights of patients and the mentally ill, and
- stigma within the society towards patients and mental health care personnel.

One tenth of the burden of disease around the world is from neuro psychiatric illness like depression, schizophrenia and substance abuse. Mental illness, according to the World Health Organization, is much more endemic than we think. And yet in Ghana, mental health is widely ignored and given little or no attention by policy makers. A lack of interest in and understanding of mental health at the government level is a key factor. This view was widely expressed by both policy makers and mental health professionals during the 2007 situation analysis. As a result, few resources are allocated to mental health.

If there were enough information for advocacy, could policy makers be convinced to place more of the country’s health budget into mental health care?
The Intervention. The MHAPP undertook to strengthen the mental health information system (MHIS) of Ghana by first changing the MHIS of government psychiatric hospitals in Accra, Pantang and Ankaful. The process adopted a participatory action research approach, building consensus and collaboration with prescribers, records departments, policy makers of the Ghana Health Service and Hospital administrators. The MHIS intervention embarked upon extensive stakeholder consultation at the initial stages with the policy, planning, monitoring and evaluation division (PPMED) of the Ghana Health Service (GHS), Heads of Psychiatric hospitals, and hospital staff. PPMED, through one of its departments, the Centre for Health Information Management (CHIM) provided technical support in data management.

Development and implementation

During several meetings with stakeholders, the International Classification of diseases, Version 10 (ICD-10) was adopted as the diagnostic tool and the MHIS registration form was developed for all the three psychiatric hospitals to achieve uniformity in data collection on patient care. A new system based on EPI-info was designed and the MHIS was partially-computerized as an improvement over the old manual system. Hence, patient data could now be stored safely, using less space, retrieved easily and its output used to aid prescribers in tracing the history of patients.

The 1CD 10 was adopted as the classification system by all three hospitals. This was accepted by CHIM which agreed to increase mental health indicators from 4 to 10 among its nationally reported indicators.

The Results. After a year of implementation there are many challenges but also many successes.

Capacity-building: The staff of the psychiatric hospitals were trained in the use of the MHIS registration form, diagnosing via ICD-10, data entry and analysis. The graph below shows the proportion of patients diagnosed with various disorders according to the ICD codes for mental and behavioral disorders.

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>F00-F09</td>
<td>1.08%</td>
</tr>
<tr>
<td>F10-F19</td>
<td>13.30%</td>
</tr>
<tr>
<td>F20-F29</td>
<td>6.91%</td>
</tr>
<tr>
<td>F30-F39</td>
<td>2.66%</td>
</tr>
<tr>
<td>F40-F49</td>
<td>7.34%</td>
</tr>
<tr>
<td>F50-F59</td>
<td>0.34%</td>
</tr>
<tr>
<td>F60-F69</td>
<td>2.49%</td>
</tr>
<tr>
<td>F70-F98</td>
<td>32.71%</td>
</tr>
<tr>
<td>F99</td>
<td>30.50%</td>
</tr>
<tr>
<td>G40</td>
<td>0.39%</td>
</tr>
</tbody>
</table>

The graph above illustrates that unexpectedly, 13.3% of cases seen at the Accra Psychiatric Hospital have a seizure disorder (G40). One would expect these to be treated at a general hospital or polyclinic or health centre. Mood and anxiety
disorders (F30 – 39) account for the highest proportion of cases seen followed by Schizophrenia (F20 -29), Substance use disorders (F10 – 19) make up 7.34% of cases seen.

Furthermore, staff numbers were increased at the records departments to aid data entry. Logistics were provided in the form of six computers for the records department of the hospitals, arch files, external hard drives, writable CD’s and perforators to aid data entry and processing to kick- start the intervention.

- **Accurate data for decision making and advocacy**: Post intervention, the data collected is orderly, comprehensive and its accuracy can be assessed objectively. The uniformity of data has enabled a comparison of data within and across the three psychiatric hospitals.

For example, the graph above illustrates that proximity to the hospitals determines use by patients. Volta region is served by Pantang and Accra Psychiatric Hospitals, and Western by Ankaful. The three Northern regions and Brong Ahafo are unable to access these hospitals easily, and may need strong psychiatric units in general hospitals.

This bar chart below shows that a good proportion of patients in Accra and Pantang hospitals, i.e. approximately 60 %, are still employed. This information is useful for advocacy for the hospitals to remain in the city to enable workers to access care easily. Such information also reduces stigma attached to mental illness as patients are seen as able to contribute to society.

**Information dissemination and communication**: Information such as above was periodically shared with hospital staff. They better understood and appreciated the holistic picture of patient care. The process facilitated teamwork and
ownership as hospital managers saw their hospital staff working collectively on the MHIS form through the use of the MHIS form flow chart.

The challenges we face with the MHIS are

- The need to allocate scarce resources (money, time) to the information system so that output may also be timely and useful,
- The need for accuracy and strict adherence to an IT policy to safeguard security and integrity of the system.
- The challenge of encouraging policy makers, health managers and advocacy groups to use the information for their work.
- The need to prepare policy makers and government for the information that will be presented to them for resources for mental health.

How should Ghana strengthen its Mental Health Information system?

- Network the hospitals completely. The cost of this to each hospital is GHC 10,000, and may be included in the IHOST-the GHS hospital information system that integrates clinical and accounting information together and is already underway in the general hospitals.
- Expand the new MHIS to the districts and regions in order to uniformly collect national data on mental health.

- The GHS can utilize this MHIS as a model for extending the use of the ICD-10 to all prescribers in Ghana, regardless of specialty of medicine practiced.

Conclusion: Information is power. The psychiatric hospitals are now armed with MHIS results which can be used to support advocacy in the making of policy and budgets. Join us to usher in the new mental health law once it is passed. Join us to make quality mental health a reality in Ghana.

For your further reading, may we suggest the following:

4. [www.psychiatry.uct.ac.za/mhapp](http://www.psychiatry.uct.ac.za/mhapp)
Contact person: Dr. Angela Ofori-Atta. University of Ghana Medical School, Department of Psychiatry.

Tel : +233 302 665102.

Email: angielam@4u.com.gh