

## Integrated primary care for mental health in the city of Sobral

### Case summary

Integrated primary care for mental health in Sobral, Brazil has resulted from a collaborative care approach involving mental health services and family health services. Primary care practitioners conduct physical and mental health assessments for all patients. They treat patients if they are able, or request an assessment from the specialist mental health team, who make regular visits to family health centres. Joint consultations are undertaken between mental health specialists, primary care practitioners, and patients. This model not only ensures good-quality mental health care, but also serves as a training and supervision tool whereby primary care practitioners gain skills that enable greater competence and autonomy in managing mental disorders.

Over time, primary care practitioners have become more confident, proficient and independent in managing the mental disorders of their patients. Sobral has been awarded three national prizes for its approach to integrating mental health into primary care.

### 1. The national context

Brazil's national context is summarized in Table 2.8. It is the world's 11th largest economy in terms of purchasing power and the 10th largest economy at market exchange rates.<sup>1</sup> Its economy is diversified and characterized by wide local variations in level of development. Sustained poverty, especially in rural areas, continues to be a challenge for the government's economic and social policies.<sup>2</sup>

**Table 2.8** Brazil: national context at a glance

Population: 186 million (84% urban) <sup>a</sup>
Annual population growth rate: 1.5% <sup>a</sup>
Fertility rate: 2.3 per woman <sup>a</sup>
Adult literacy rate: 89% <sup>a</sup>
Gross national income per capita: Purchasing Power Parity international \$ 8230 <sup>a</sup>
Population living on less than US\$ 1 per day: 7.5% <sup>a</sup>
World Bank income group: upper-middle-income economy <sup>b</sup>
Human Development Index: 0.800; rank 70/177 countries <sup>c</sup>

**Sources:**

- <sup>a</sup> World Health Statistics 2007, World Health Organization (<http://www.who.int/whosis/whostat2007/en/index.html>, accessed 9 April 2008).
- <sup>b</sup> Country groups. The World Bank (<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20421402~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>, accessed 9 April 2008).
- <sup>c</sup> The Human Development Index (HDI) is an indicator, developed by the United Nations Development Programme, combining three dimensions of development: a long and healthy life, knowledge, and a decent standard of living. See Statistics of the Human Development report. United Nations Development Programme (<http://hdr.undp.org/en/statistics/>, accessed 9 April 2008).

Brazil's population is largely diversified in ethnicity and not distributed uniformly across the country. Portuguese is the official language, spoken by nearly the entire population.

## 2. Health context

Key health indicators for Brazil are displayed in Table 2.9. The country is faced with an emerging double burden of infectious and noncommunicable diseases. Leading causes of death are heart disease and stroke, followed by perinatal conditions and violence.<sup>3</sup>

**Table 2.9** Brazil: health context at a glance

Life expectancy at birth: 68 years for males/75 years for females
Total expenditure on health per capita (International \$, 2004): 1520
Total expenditure on health as a percentage of GDP (2004): 8.8%

**Source:** World Health Statistics 2007, World Health Organization (<http://www.who.int/whosis/whostat2007/en/index.html>, accessed 9 April 2008).

A new health system – the *Sistema Único de Saúde* (SUS) or Unified Health System,<sup>4</sup> was created by the Constitution of 1988, which ended the dictatorship that had existed since 1964. The health system is based on three principles: universality, equity, and comprehensiveness. The SUS represents a great advance in the public health system because nearly all 5600 municipalities in the country, including rural areas, now have a local network of health services, mainly primary care.

Private health insurance is also widely available and may be purchased on an individual basis or obtained as a work benefit (major employers usually offer private health insurance benefits).

Public health care is still accessible for those who choose to obtain private health insurance. As of March 2007, more than 37 million Brazilians had some sort of private health insurance.<sup>5</sup>

## Mental health

Although national epidemiological data are not available, regional studies indicate high levels of mental disorders. For example, a community-based study of adults revealed that 22% were currently suffering from a mental disorder. The most prevalent disorders were: nicotine dependence (9%), anxiety disorders (6%), mood disorders (5%), alcohol abuse/dependence (4%), and somatoform disorders (3%).<sup>6</sup> Similar results have been found in other regional surveys.<sup>7,8</sup>

Since the 1980s, with the support of the voluntary sector and WHO/PAHO, the mental health sector began to change, moving from large psychiatric hospitals to community-based mental health services called CAPS (*Centros de Atenção Psicossocial*, or centres for psychosocial care). This model is still evolving and is driven by service reorganization, the recognition of the human rights of people with mental disorders, and the desire to provide equitable mental health services.<sup>9</sup> In this process, the mental health service system has, in some regions, moved from a vertical to a quasi-vertical model, but it has not yet reached full horizontal integration into primary care. The country is investing in the expansion of CAPS across the country; more than 1000 CAPS have been established already. These centres are the cornerstone of the mental health service network, which consists of outpatient services, including specialized outpatient services for children, substance users, people with chronic mental disorders, and people who have been discharged from inpatient treatment at a mental health facility. Some of these centres also offer 24-hour emergency care services, day treatment, partial hospitalization services, and psychosocial rehabilitation services. The CAPS are expected to work closely with family health teams, mental health units in general hospitals, specialized mental health outpatient services, and residential services. It is anticipated that with the increasing efficiency of the community-based network, traditional psychiatric hospitals eventually will be closed.

## 3. Primary care and integration of mental health

Until 1994, primary care in Brazil consisted of Basic Health Units, staffed by multidisciplinary teams. Consultations were mainly patient-initiated and focused on solving the immediate physical health problem. The SUS subsequently developed an innovative service delivery model: the Family Health Strategy (FHS).<sup>10</sup> About 25 000 teams (Family Health Teams: FHT) comprising general practitioners, nurses, nursing technicians, and community health workers, have been created to provide ongoing primary and community-based health care. They are expected to manage 80% of health problems presenting to them, including diagnoses and treatment of most diseases. FHTs also support health promotion and prevention in a manner consistent with the Alma Ata Declaration.

Each FHT is responsible for 3000 to 4000 people, or 600 to 1000 families, from a defined geographic area. Families are registered and social service interventions are included among the many responsibilities of the FHTs. However, inadequate undergraduate and postgraduate training of health professionals has limited the implementation of social service interventions.

## Mental health

A federal law established in 1999, pertaining to mental health services reform in Brazil, stresses that the Brazilian population has the right to be treated in community settings.<sup>11</sup> The National Mental Health Policy specifies training and supervision of general health workers in mental health issues as a strategic priority to integrate mental health into primary care.<sup>12</sup>

The degree to which mental health is currently part of primary care varies between municipalities. One model of integration being used increasingly is collaborative care between primary care and mental health professionals through a network (*matriciamento*). In this model, mental health training and supervision are provided by mental health professionals to an extended network of FHTs based on joint consultation and interdisciplinary interventions (see best practice, below).

## 4. Best practice

### Local context

Sobral is a city of around 175 000 inhabitants in the state of Ceará. The state has many impoverished inhabitants, ranking 22 out of 27 Brazilian states in terms of gross domestic product (GDP) per capita.<sup>13</sup> Sobral is located in the north-eastern region of Brazil, 222 kilometres from Fortaleza, the state capital. Sobral's economy is based traditionally on commerce and agriculture, but industrial activity has risen dramatically within the last 10 years, causing the migration of former farmers from smaller agricultural villages to Sobral to work in the footwear industry.

A study conducted in 2004 in an isolated rural district of Sobral indicated that around 60% of primary care patients had mental disorders or significant mental distress, and around 40% had medically unexplained symptoms.<sup>14</sup>

The Comprehensive Mental Health Network of Sobral (*Rede de Atenção Integral à Saúde Mental de Sobral*) consists of a number of components.

- *Family health and primary care mental health support teams.* Family health teams (FHTs) are integral to the mental health care network. All non-emergency cases are seen first by FHTs, before possibly being further evaluated by a Mental Health Support Team (MHST, see below) or referred to a CAPS. The service has developed coverage for 100% of Sobral's territory, although many FHTs are incomplete, requiring support from family doctors of neighbouring areas.
- *CAPS.* Sobral has two CAPS – one is specialized in substance abuse and the other is dedicated to all other mental disorders, including services for all age ranges. CAPS are responsible mainly for the specialized mental health care within the municipality, including outpatient consultations, first-line emergency care, intensive day care, and psychosocial rehabilitation. The CAPS are designed to care for people with moderate to severe mental disorders, with an emphasis on the latter.
- *General hospital psychiatric care unit.* If required, hospitalization occurs in one of two different settings: psychiatric beds in an internal medicine ward; or a psychiatric unit, for those patients who present greater risk for themselves and others. Families are encouraged to

accompany patients during their stay. The average length of stay is kept as short as possible (around eight days, on average).

- *Therapeutic home.* When the psychiatric hospital in Sobral was closed (see below), a house was established to receive patients who lacked family support. This house, called a therapeutic home, is designed to resemble a typical family residence.

## Description of services offered

When patients present to primary care practitioners, they usually receive an assessment of both their physical and mental health status. If patients self-refer because they believe they have a mental health problem that requires treatment, their first point of contact is the primary care practitioner. Primary care practitioners treat patients with mental disorders if they are able, or request an assessment from the MHST. In most instances, a request for assistance results in a joint consultation between a specialist from the MHST – often but not necessarily a psychiatrist, the primary care practitioner, and the patient. This model, which has been called collaborative care or shared mental health care, is not only important for ensuring good quality mental health care, but also serves as a training and supervision tool whereby primary care practitioners gain skills that enable greater competence and autonomy over time.

Community therapy groups are another important resource. They are offered to the vast number of patients who present within primary care settings with mild to moderate mental disorders. Therapeutic groups are led by mental health and primary care professionals, and support groups are managed by community workers and lay participants. Many community therapy groups exist throughout Sobral, and they provide the MHST an excellent referral resource.

## The process of integration

### General health care reform movement

The need for contact between mental health professionals and FHTs was identified early during health care reform in Sobral. Because primary care strongly emphasized community and family care, the need for more specialized knowledge in a number of areas, including mental health became apparent. However, at the time most primary care physicians did not view mental health care as part of their role. Although some psychiatry was taught as part of medical training, the information provided was not closely applicable to primary care practice.

### Human rights violations in a psychiatric hospital

As the movement for integrated mental health services within primary care was gaining prominence, the closing of a regional psychiatric hospital acted as an additional catalyst. Prior to 1999, most mental health care in Sobral was provided at a private psychiatric hospital. This hospital, which was financed by the SUS, provided very low-quality care. In 1999, a patient who had been admitted following a psychotic crisis died at the hospital amid signs of violent abuse. His family sought reparation, and with the help of human rights organizations exerted considerable pressure on the municipal health system through the local media. The health secretariat of Sobral investigated the case and cancelled the hospital's licence. This led to the closing of the hospital in 2000. At that point, the municipality was spurred to find an alternative, hence the additional political support for integrating mental health into primary care.

## The evolution of a joint consultation model for integrating mental health into primary care

The specific integrated model for integrating mental health developed over time. In 2000, a single psychiatrist started visiting a few FHTs to discuss cases and consult jointly with patients. As a result, referrals to CAPS became more adequate and appropriate, compared with those from other family health services. In addition, some patients who previously would have been referred were treated within the family practice, and more people with mental disorders were identified and either treated or referred. Physicians, nurses, and community health workers became more sensitized to and less troubled by mental disorders in their patients. In summary, it quickly became clear that this model had potential to be applied more broadly across the municipality.

As a result of this success, more psychiatrists started visiting FHTs. Importantly, these psychiatrists also worked in the CAPS and in the hospital and therefore benefited directly from the more appropriate referrals. The beginnings of the MHSTs thus happened in a natural and evolutionary way, but when the benefits were realized, the service was extended and formalized. This process was organized and coordinated by the Mental Health Network, with support from Sobral's Health Secretariat and its primary care coordination team.

By 2004, all family health services were visited once or twice a month by psychiatrists. In addition to joint consultations and case discussions, decisions about patients' mental health treatment started to be handled from primary care. Both the mental health specialists and the FHTs were satisfied with this new arrangement.

As the primary care model developed, other mental health professionals such as psychologists, social workers and occupational therapists began to rethink their roles vis-à-vis the FHS. In 2005, small multidisciplinary groups were formed and became responsible for a certain number of FHTs. The professionals arranged their schedules to work within a range of primary family health centres and to reorient their practices to support the FHTs.

Currently, the MHSTs typically visit the FHTs at least once a month. The cases to be seen together are selected by the primary care practitioners, and are usually patients with mental disorders that require treatment. In the beginning, patients with common mental disorders were chosen for joint consultations. However after some time, primary care physicians started managing these patients themselves, and those with more complex mental disorders became the focus of joint consultations. This care model was seen to be far preferable to and more effective than the classical referral and back-referral model.<sup>15</sup> Joint consultation also helped reduce burn-out in the FHTs, because it reduced the burden of being asked to singlehandedly solve all mental health problems among their patients.

To make the new system work, political commitment was needed from the municipality to integrate mental health care into the family health centres. Meetings were held to ensure that the municipality was aware of, and supported, all developments. If certain FHTs were not collaborating fully, practices were informed by the authorities that they were expected to assume mental health responsibilities. FHTs were assured nonetheless that they would be closely supported in this process.

Strong links with specialist services were also required and again, it was necessary to have a number of consultative meetings to ensure that these connections were in place. An excellent working relationship with the emergency hospital system was needed to ensure that patients who could not be managed in the community could be accommodated. Moreover, FHTs needed assurance that secondary-level services would accept referrals of all patients needing this level of care.

While a few municipalities in Brazil do not authorize family physicians to prescribe psychotropic medication from public (and free) pharmacies, the planners of the integrated mental health service in Sobral endorsed the prescription of these medications by family physicians, thus increasing their treatment options. This authorization was critical to the success of the integrated service.

### Training

A number of other training methods were used in addition to joint consultations and interventions with FHTs. A similar joint consultation approach was initiated for health professionals in postgraduate training (e.g. residencies or specialization courses). Short sensitization courses were also held for mental and family health professionals to highlight the importance of mental health in primary care, and the work of the MHSTs. Although these short training courses were essential to help overcome initial fears of mental disorders, they required follow-up through regular supervision and support.

## 5. Evaluation/outcomes

Because the Sobral experience was developmental rather than deliberately planned, formal evaluation was not conducted. The success of the project is thus mainly anecdotal, with many reports that FHTs became more confident, proficient and independent in managing the mental health problems of their patients. Some small qualitative and quantitative assessments have been conducted. For example, one small case-control study found that there was no major change in the profile of patients referred to the CAPS. However, the service was able to treat and maintain more patients with moderate to severe symptoms than it did before.<sup>16</sup>

In addition, Sobral has been awarded three national prizes for its approach to integrating mental health into primary care: by the Ministry of Health;<sup>13</sup> by the pharmaceutical industry with the support of the Brazilian Psychiatric Association;<sup>17</sup> and by a health magazine targeted to the general population.<sup>18</sup>

Two other municipalities in Brazil, Macaé and Petrópolis, have implemented similar models of collaborative care and conducted evaluations of their services. In Macaé, the number of hospitalizations dropped to one third of previous levels.<sup>19</sup> In Petrópolis, hospitalizations were reduced by 45% and emergency cases were reduced by 33%. After three years, at least 50% of patients using psychotropic medication and psychotherapeutic support were being treated by the FHTs. Patients with medically unexplained symptoms were better understood and managed by the interdisciplinary team than prior to the introduction of the collaborative care model, and patients with chronic disease such as diabetes and hypertension had improved adherence to treatment.<sup>20</sup>

## Views of family physicians and patients

A qualitative study in Sobral indicated that family physicians demonstrated good diagnostic and treatment skills for depression and anxiety disorders. Family physicians reported that the MHST played an extremely important role in their development as comprehensive health providers, and they expressed more self-confidence to manage common mental disorders without referral to specialized care.<sup>21</sup>

Importantly, family physicians also reported that their general patient communication skills were improved, including active listening and empathy, giving diagnoses, and managing dysfunctional families with or without family violence.

Across all three municipalities, the following observations have been made.

- Family health professionals and community members are slowly changing preconceived ideas and stigma about “madness”. They are increasingly accepting people with mental disorders, thus making it easier to treat and integrate these patients.
- Users who had never had access to treatment and who, in many cases, were being held in private captivity have initiated treatment within their communities.
- Users receive better care because in addition to improved medical treatment, they also now have access to community-based group therapy.
- Health professionals are following better prescription practices, such as more limited use of benzodiazepines.
- Organized follow-up of patients has improved, providing continuity of care and improving treatment efficiency.
- Family health professionals are continually improving their knowledge through ongoing information exchange with mental health professionals and workshops.

## 6. Conclusion

Joint consultation has enabled general practitioners to address the mental health needs of patients and to provide integrated, holistic care. Primary care practitioners treat patients if they are able, or request an assessment from the specialist mental health team, who make regular visits to family health centres. Joint consultations between mental health specialists, primary care practitioners, and patients have helped improve mental health care, and also enabled primary care practitioners to gain important skills. Over time, primary care practitioners have become more confident, proficient and independent in managing the mental health problems of their patients.

### Key lessons learnt

- The overall health reform presented the opportunity and provided an important stimulus to integrate mental health into primary care. Concern about human rights violations in psychiatric hospitals further encouraged the process.
- Integrated mental health care resulted from a collaborative care approach involving both mental health services and family health services. This integration was facilitated by a mobile mental health team.

- Mental health support teams may include psychiatrists, psychologists, psychiatric nurses, occupational therapists and social workers, depending on need.
- Mental health support teams must visit primary care units on a regular basis and work in a consultation-liaison model.
- Joint consultation can be used effectively for continuous mental health education of primary care teams, allowing practical training to be held in addition to short theoretical courses.
- Mental health workers can act as a source of support for family health teams as they adjust to their new roles.
- Groups are an important vehicle for mental health promotion and treatment. They may be therapeutic groups, led by mental health and primary care professionals; or support groups, managed by community workers and lay participants.

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