

Marcia Terra da Silva^I

Selma Lancman^{II}

Carolina Maria do Carmo
Alonso^{III}

Consequences of intangibility in the management of new mental health services

ABSTRACT

OBJECTIVE: To analyze work organization in psychosocial healthcare services from the logic of the service management field.

METHODS: Organizational analysis was performed, using a case study in a psychosocial healthcare service located in the city of São Paulo, Southeastern Brazil, between 2006 and 2007. A total of five sources of information were analyzed: Ministry of Health documents, research reports made in the service studied, service records, interviews with healthcare workers and managers and simple observation. Interviews dealt with objectives, results and assessment of work process. Each source was treated differently, according to its purpose. A subsequent dialogue about the results obtained aimed to make a set of observations on which the case study was founded.

RESULTS: The service proposes to deliver a very intangible result, which views the user in their social context. The intended change in the user's conditions was described as "the person living better". Such condition is difficult to be defined and understood in terms of the details and limits of this change, thus hindering measurement of results. In addition, the work process involves activities which are not routinary, not predictable and sometimes simultaneous, so that the team finds it difficult to recognize and legitimize efforts made to perform work, a fact described as "work invisibility" by workers.

CONCLUSIONS: The assessment process was found to be a complex aspect of this intangibility, associated with inadequacy and insufficiency of the municipal health system's management structure to include a service of this nature. Results enabled better understanding of a field of work where workers' and users' subjectivity is inherent in the service management process.

DESCRIPTORS: Mental Health Services. Health Manpower. Health Management. Organizational Case Studies. Work Organization.

INTRODUCTION

Public health services have undergone changes since the implementation of the *Sistema Único de Saúde* (SUS – Unified Health System) in Brazil, in the 1990s. The SUS has established a mental health care model with the constitution of a service network that replaces psychiatric hospitals, where *Centros de Atenção Psicossocial* (CAPS – Psychosocial Care Centers) play a strategic and innovative role.

The strategic character refers to their key role in integrating the mental health care network in its coverage area. The activities developed by the CAPS include the following: local guidance on mental health policies and programs; regulation of the gateway to the health care, support and supervision network

^I Departamento de Engenharia de Produção. Escola Politécnica. Universidade de São Paulo. São Paulo, SP, Brasil

^{II} Departamento de Fisioterapia, Fonoaudiologia e Terapia Ocupacional. Faculdade de Medicina. Universidade de São Paulo. (FMUSP) São Paulo, SP, Brasil

^{III} Programa de Pós-Graduação em Ciências da Reabilitação. FMUSP. São Paulo, SP, Brasil

Correspondence:

Marcia Terra da Silva
Depto. Engenharia de Produção
Escola Politécnica da Universidade de São Paulo
Av. Prof. Almeida Prado, trav. 2, n. 128
Cidade Universitária
05508-070 São Paulo, SP, Brasil
E-mail: mtdsilva@usp.br

for the work of *Programa Saúde da Família* (Family Health Program) teams and Community Health Workers; coordination of supervision activities of local psychiatric hospital units with the local manager; and updating of the list of people who use mental health drugs in the area.⁸

The innovative role of the CAPS is in the quantity and diversity of its attributions, which involve clinical service for users and integration of the local mental health care network.

Health care provided in the CAPS is built from individual requirements: depending on the user and the agreement made with him, the therapeutic process is defined as individual care (psychotherapy, therapeutic follow-up, medical consultation, home care) and/or group care (therapeutic groups, workshops, income generation projects, and participation in cultural and artistic events, among others). These processes are long, continuous and permanent, resulting in the design of an operation that supports these characteristics.

The CAPS aims to change the hegemonic culture towards people with severe and/or persistent mental disorders. The building of an organizational project of this nature is a difficult task and must be a subject for planning, reflection and specific actions.

Studies show that the CAPS work organization occurs more through inner agreements and work performance conditions than the model which generated these services. Thus, each type of equipment defines its work process from its available resources.¹⁰

This functioning assures a high level of autonomy to the service, but reduces the possibilities of negotiation with managers and the guarantee of work conditions and infrastructure of personnel, materials necessary for the project and facilities that reduce the risk of improvised and unplanned functioning of workers. Thus, the innovative character of the CAPS requires efforts to implement an organization adjusted to its needs, and conceptual assumptions about work organization must be made explicit.¹²

Based on the assumption that the service provided by the CAPS involves an extreme case of production of intangible results,² the present study aimed to analyze the work organization in psychosocial care centers from the logic of the service management field.

METHODOLOGICAL PROCEDURES

This study is part of a broader research project on mental health service work process about changes that have been occurring in policies of this sector, following distinct approaches.⁵

Theories about production management are founded on the industrial sector and have undergone changes in the 20th century. This study will show some of the important marks of this theoretical evolution as the basis for this discussion.

The industrial production model promoted by Ford in the beginning of the 20th century was based on detailed specification and standardization of the product and production process, on worker specialization, and on product and task control. Its efficacy measures were associated with high volume of production and low cost of product. Even though it has been questioned in the last 50 years, this model has not been completely overcome, as some of its attributes remain in new models and are also found in service production.

In the context of services, more developed management models add the concept of value to the client by emphasizing that service production is closely associated with the existence of a relationship between user and service. The main service management attributes include four fundamental production characteristics: intangibility (condition of immateriality of result produced); heterogeneity (associated with the difficulty to standardize results and production process); perishability (the service cannot be “stored” for later use) and simultaneity of production and consumption, which leads the user to participate in production as a co-producer.

Bowen & Ford² observed differences in the assessment of effectiveness and efficacy of operations, in the design of the production strategy and in the definition of production processes between the production of tangible goods and intangible services. They describe the difference between service and manufacture organizations as follows: “a service organization is the one that produces something that can be perceived, felt and experienced”, whereas “a manufacture organization is the one that produces something that can be seen, touched and held.”

Due to the intangibility of results, the manager does not have direct measures to detect production quality, once they depend on users’ perceptions of results. Thus, the final results of a service such as CAPS are in the user and community perception and cannot be measured by objective instruments or parameters developed for other health services. However, from the point of view of service management, assessment instruments are necessary to find out flaws in the process and correct them so as to improve management processes.

Some authors specialized in service quality^{4,9} defend the use of questionnaires to survey opinion among users, defining service quality as the difference between users’ perception and expectation regarding the service. However, this form of assessing quality is affected by the level and type of service intangibility.

Service intangibility has two dimensions: the physical one, associated with the level of service materiality; and the mental one, concerned with the level of difficulty in defining, formulating or understanding the service accurately. The greater the second dimension, the more difficult it will be for perception and expectation in the quality assessment process to be made explicit, thus requiring validation by specialists in production process.⁶

This subjective character has implications for CAPS management, where the difficulty in defining the work process plays an important role. In addition to this, the CAPS shows difficulty in expressing details of the work process that do not obey descriptive parameters of task. Even workers find it difficult to define what they do, once their work does not have an objective form in the sphere of prescribed work.³

The production process must be able to deal with individuals' heterogeneity. In the industrial production, commodities are standardized and controlled, aiming to equalize the productive process. Similarly, in mass services, even health services, the attempt to control the process causes variability among users not to be considered.

By proposing new forms of mental health service, new forms of management are designed. In the CAPS, the therapeutic process is negotiated between user and professional in the beginning of treatment and renegotiated when necessary, resulting in different therapeutic processes, even if the diagnosis is the same, because people, histories and social contexts are not. The search for uniformity of behavioral pattern or workers' routine does not apply to CAPS management and the heterogeneity of processes is intense and inherent in the service.

The process of production of services performed in the CAPS depends on user's commitment to the service process.⁷ Worker and user must work together to obtain results, defining participation in expected activities, in the assessment and in the possibility of changing the therapeutic process, requiring this user to be committed to the entire service production process in the CAPS. In other words, consumption and production of the service provided are simultaneous. Organizations with this characteristic are forced to build a relationship with the user that enables the joint construction of action alternatives.

Simultaneity between production and consumption influence another attribute: perishability, a key element in service demand and capacity management, once a service cannot be previously produced and stored for later use.

Nowadays, health service assessment considers the specificities of each context, including the relationships

that reflect on the functioning of practices. In health planning, assessment must be adapted to the scope of intervention or rationality, which supports different practices and contexts, in addition to considering the multidimensional nature, which includes objective and subjective dimensions.¹

Health service assessment is traditionally conceived from the service volume or user's length of stay in the service. The product of these services is understood as the difference produced in users, a difference that not always translates as objective measures, but rather as the change of state perceived by the user himself.

In mental health, especially when caring for users in serious conditions, developing management indicators is a complex task, once the cure, due to the chronic nature of pathologies, is not always possible. Care may not cause any changes in the patient's state in the short term, if "cure" or "hospital discharge" were considered as the only purpose.

The actions performed, however, lead to results in quality of life, in the reduction in the number of hospitalizations, and in the improvement of family life, among other things. These results are not measurable and can hardly be transformed into objective indicators, hindering the assessment of results, which are full of subjectivity and doubts for managers and workers.

For the organizational analysis,¹¹ a case study was used as research strategy to find out about a modern phenomenon in its real context.¹⁴

A total of five sources of information were used: official federal, state and municipal documents; reports and publications of data from the research project in which this article is included;⁸ analysis of records of the CAPS studied; interviews; and simple observations. These different sources corroborated to understand the inclusion of this service in the current situation of public policies on mental health.¹³

Field data collection and consultation of documentary sources were performed between February 2006 and August 2007. The service studied was a CAPS-I of the city of São Paulo, which was comprised of 26 workers, of which 12 were specialized technicians: psychiatrists (3), psychologists (4), occupational therapists (2), nurse (1) and social workers (2); nine were support professionals: nursing assistants (4), pharmacy assistant (1) and assistant managers (4); and five outsourced employees divided into the following areas: property security (2), cleaning (2) and kitchen (1). The fact that 30% of professionals of this service have worked in the area for over 20 years and have a historical and critical dimension of the conception and implementation of the service enhanced the case study.

Each source was treated according to the purpose it served. A subsequent dialogue about the results obtained was conducted to make a set of observations¹⁴ on which the case study was founded.

Governmental documents and the research report were used as simple sources of data, without analytical treatment. Among other types of information, these documents enabled the identification of the organization's role and the understanding of the concept of service. The contrast between what is prescribed in the documents and what is described by workers provides the basis for the analysis of work organization and helps to reveal eventual flaws in planning or to identify conditions of operation that are inherent in the type of service provided.

The study of records identified the flow and the delivery of services, enabling the analysis of data on workload, variety, capacity, intensity, and service demand. This survey also covered facilities, professionals involved, attributions and employment relationships, the service operation process (the several steps and activities this operation is comprised of, concomitant and/or competing activities); activities performed in and out of the CAPS; and activities that involve other institutions and partnerships, among other things.

In the interviews, researchers sought to understand the meaning workers give to administrating and participating in a management process of such nature and its consequences for routine activities.

A total of nine interviews were conducted: four with workers of the management sector, four with mental health technicians and one with a health district coordinator (to observe the view of those who receive information from the CAPS).

Interviewees were selected according to criteria of representativeness in relation to the group of workers, considering the diversity of attributions and the hierarchical levels. The workers selected were responsible for managerial activities, and different clinical and management support activities, which included relevant information.

The interviews followed semi-structured guidelines, which were developed from the following questions: What is produced in this service? How are the results, prescribed in the concept of service, produced? How is the service assessed? What are the most relevant operational and service management difficulties and the strategies developed to overcome them? The interviews were analyzed regarding differences and similarities that helped to characterize distinct views on the CAPS functioning among interviewees.

This study was approved by the *Comissão de Ética de Pesquisa do Hospital das Clínicas da Faculdade de*

Medicina da Universidade de São Paulo (São Paulo University School of Medicine Clinical Hospital Research Ethics Committee). All participants signed an informed consent form.

RESULT ANALYSIS AND DISCUSSION

Inaugurated in 2002, the service studied had 125 users monthly on average, psychotics in their majority, whose care follows distinct frequency patterns. The following were offered: individual and group services, community events and assemblies.

The health care network in the area studied comprised the following services, which counted on mental health professionals or were a mental health referral center in the area: one CAPS-I, one community and cooperation center, eight basic health care units and one school health center.

The CAPS studied had a registered population of about 380,000 people. The national mental health policy recommends one CAPS-I per 20,000 to 70,000 inhabitants.⁷ This fact has led researchers to question the current model's level of implementation. The reason for this would be the lack of the following: a management project, which would prescribe resources to implement the necessary units; qualification programs for workers and management of these institutions; material and installation resources. The complete implementation of the service network would also provide more strength to it and become a reference point for the CAPS. The partial implementation compromises the functioning of the network as a whole and of each service in particular. In addition, it may de-characterize the meaning of the new model, according to what was reported by specialized technical professionals.

"The CAPS can only be used to provide alternatives to psychiatric hospitals if it's in the mental health and health service network. Care has to be intensive while the patient's really ill. We shouldn't keep him in institutionalized equipment when he's not so ill." (worker 1)

"We don't have a referral center (...) you need to, but can't refer patients, we don't have an agreement with any other CAPS (...), if the case is serious, it needs special care, but there's nothing I can do." (worker 2).

The objectives of the CAPS consider the global context and each user's individual needs, following actions aimed at the improvement of both the clinical condition and the social context by interacting pieces of equipment in its area of coverage. These two aspects require distinct efforts, abilities, resources and strategies.

"The CAPS is a service designed for social inclusion: one thing is (the patient) being stabilized, and the other is having a perspective of inclusion once

again... Our partnerships try to create a network... based on our concept of area of coverage and on this idea of public mental health... All compositions are like this. The oldest one is the MAM (Museu de Arte Moderna – Museum of Modern Art)... They wanted to offer vacancies in a photography class for (our patients) and another for the general public. We don't want it this way, because it doesn't create a network. (We proposed): half of the vacancies for us, the other half we can offer. Then, we contacted an NGO, with a neighboring school (with vacancies for parents or teachers).” (worker 2)

Interactions with partner organizations are necessary to weave the user's network of relations, requiring time and abilities that not everyone has.

The CAPS is also responsible for self-management, attributing the responsibility for the construction of the organizational structure and inner management to the team, in addition to the remaining activities. This process requires predicting the resources, actions and inter-institutional interactions needed; the execution of what was planned; and the assessment of results and corrective actions, reviewing and improving stages.

Intangibility, an important attribute in service management, appeared mainly as the difficulty in defining, formulating or understanding the service more accurately. For managers, workers and users, the difficulty in recognizing what is produced in the CAPS, together with the complexity of objectives proposed, causes the incapacity to recognize the quality and volume of what was performed in a certain period.

“The result is... the person living better... but the length of treatment and results have no parameters, they depend on many variables. (That is why) there are no production indicators...” (worker 4)

This fact can also be observed in the difficulty in obtaining data on monthly production. The management employee could tell how many people were served in the month, but not how much work was necessary, once this depends on the type of treatment, patient, and workshops provided in the period.

Another difficulty in service management results from the inaccuracy to establish the beginning and end of treatments, due to users' chronic, cyclical and incurable condition.

The organization of medical records reflected this inaccuracy. The CAPS maintained 826 medical records of registered patients, but professionals acknowledged that many could be inactive, once the user could have moved or died. Some users had not appeared for a long time and were considered as “discharged”, even though they could come back some day. These accounts reflect

the service's difficulty in recording and celebrating its successes, as well as in analyzing and learning from mistakes and failures.

The work process is scarcely made explicit, because it involves a great diversity of tasks, many of which are neither routine, nor predicted. When requested, professionals, including the manager, found it difficult to record the activities performed and distinguish where their working hours are spent.

Many procedures performed are not properly recognized as part of the work, even though they are necessary for the functioning of the service. Lack of routine results from the amount and variability of events, a fact inherent in the therapeutic project, where the inner environment (in the institution) and the outer environment are one of the forms of treatment. This work process does not generate neither qualitative nor quantitative pieces of evidence of production. This hinders visualization of the result and effort made, thus creating the feeling of invisibility among workers and service managers.

This invisibility also hinders planning on what resources are necessary and how they will be spent, and express, justify and transform needs into budget items, when the process is not clear or evident for workers and management.

Dialogue with the municipal government is difficult as well. The bureaucratic rationality is rigid, with pre-defined budget items and norms and without flexibility towards the specificities of the services. Resources are assessed and allocated by the central administration. The specific needs of the CAPS are not recognized and, as they are subordinate to the health sector, they oftentimes fail to gather resources for workshops and social and cultural activities, essential in the therapeutic process, though not acknowledged as health activities from the point of view of management.

In the result assessment process, records were found to refer to the visits made exclusively, which does not reflect the value of the service, once they are only part of what is provided.

Workers recognize their efforts, but cannot show the immediate results or formal production records. User's length of stay in the service is long, chances of recovery are low, results are slow, and the discharge, or clinical improvement, does not characterize either the end or the success of the treatment, due to the user's chronic condition and cyclical nature of the care process.

From the point of view of management, the assessment processes used, or the lack thereof, were found to be one of the most complex aspects associated with intangibility. The proposals available in the literature on management explain, but do not solve the problem, and

it is difficult to overcome this in the service analyzed by this study. Zarifian,¹⁵ for example, explores service assessment from the broad concept of value created by criticizing classic forms of assessment, which do not apply to services that focus on general objectives, such as the CAPS.

FINAL CONSIDERATIONS

In the CAPS, intangibility results in invisibility and difficulty in recognizing and legitimizing the efforts made to enable the work to be performed and to characterize service results. Inadequacy and insufficiency of health management models were observed when welcoming a service which is innovative and complex and shows results that are hardly defined. This study indicated the intangible character of some of the CAPS activities, because it is not enough to record the number of users served or amount of service performed. Instead,

it is necessary to go beyond and consider the complexity inherent in the objectives expected for this service.

However, acknowledging the specificities of this service is not enough. The CAPS routine and planning must guide workers and managers to assess the path followed, and show the activities performed and the difficulties found to develop the service. By planning work objectivity, workers would not waste their effort and, in the medium term, the recognition of practices that contribute to the advancement of this and other CAPS would be facilitated.

The dialogue between those participating in service management and the difficulties in CAPS management enabled fruitful exchanges for both sides. The questions that arose led workers to reflect on their own work. From the point of view of management, this study enabled a better understanding of an area where subjectivity is inherent in the work process.

REFERENCES

1. Bosi MLM, Uchimura KY. Avaliação da qualidade ou avaliação qualitativa do cuidado de saúde. *Rev Saude Publica*. 2007;41(1):150-53. DOI: 10.1590/S0034-89102007000100020
2. Bowen J, Ford RC. Managing Services Organizations: Does have a thing make a difference? *J Manage*. 2002;28(3):447-69.
3. Campos CMS, Soares CB. A produção de serviços de saúde mental: a concepção dos trabalhadores. *Cienc Saude Coletiva*. 2003;8(2):621-8. DOI: 10.1590/S1413-81232003000200022
4. Harvey J. Service Quality: a tutorial. *J Oper Manage*. 1998;16(5):583-97.
5. Lancman S, organizador. Políticas públicas e processo de trabalho em saúde mental. Brasília: Paralelo15; 2008.
6. Lovelock C, Gummesson E. Whither services marketing? In search of a new paradigm and fresh perspectives. *J Serv Res*. 2004;7(1):20-41. DOI: 10.1177/1094670504266131
7. Onocko-Campos RT, Furtado JP. A transposição das políticas de saúde mental no Brasil para a prática nos novos serviços. *Rev Latinoam Psicopatol Fundam*. 2005;8(1):109-22.
8. Pereira LMF, Rizzi HJ, Francischete da Costa AC. Análise sócio-histórica das políticas públicas em saúde mental no Brasil. In Lancman S, organizador. Políticas públicas e processo de trabalho em saúde mental. Brasília: Paralelo15, 2008.
9. Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. *J Marketing*. 1985;49(4):41-50. DOI: 10.2307/1251430
10. Ramminger T, Nardi HC. Modos de subjetivação dos trabalhadores de saúde mental em tempos de reforma psiquiátrica. *Physis*. 2007;17(2):265-87. DOI: 10.1590/S0103-73312007000200004
11. Silva MT, Salomão S, Alonso CMC, Silva T, Matsubara S, Freitas ET, Gomes CES, Cipulo GHG. Transformação do modelo de atenção em saúde mental e seus efeitos no processo de trabalho e na saúde mental dos trabalhadores. In Lancman S, organizador. Políticas públicas e processo de trabalho em saúde mental. Brasília: Paralelo15, 2008.
12. Souza LEPEF, Contrandriopoulos AP. O uso de pesquisas na formulação de políticas de saúde: obstáculos e estratégias. *Cad Saude Publica*. 2004;20(2):546-54. DOI: 10.1590/S0102-311X2004000200023
13. Voss C, Tsiriktsis N, Frohlich M. Case Research in operations management. *Int J Oper Prod Manag*. 2002;22(2):195-219. DOI: 10.1108/01443570210414329
14. Yin RK. Estudo de Caso: planejamento e métodos. Porto Alegre: Bookman; 2003.
15. Zarifian P. Valor, organização e competência na produção de serviço. In: Salerno MS, editor. *Relação de Serviço*. São Paulo: Editora SENAC; 2001. p.1-65.

Research funded by the *Ministério da Saúde* (Brazilian Ministry of Health) and *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq – Proc. nº 554503/2005-0)

This article underwent the peer review process adopted for any other manuscript submitted to this journal, with anonymity guaranteed for both authors and reviewers. Editors and reviewers declare that there are no conflicts of interest that could affect their judgment with respect to this article.

The authors declare that there are no conflicts of interest.