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## IMPLICATIONS OF PRIMARY HEALTH CARE MODELS IN WORKLOADS OF HEALTH PROFESSIONALS

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**ABSTRACT:** This study discusses the influence of two health care models on the workloads of health professionals. This qualitative study was conducted with Family Health teams and traditional teams working in southern Brazil. Focus groups, interviews, and documentary study were used to obtain data, which were analyzed combining Thematic Content Analysis with the features of the AtlasTi software. In both models, it was evident that the problems in the organization and management of health care, excessive demand and ineffective problem-solving are the main sources of increased workloads while affinity with the health care model and teamwork were mentioned as sources of workloads reduction. We conclude that the increase in workloads in Family Health model was affected by gaps between what was prescribed and performed, while in the traditional model this was due to fact that the health care model is based on biomedicine.

**DESCRIPTORS:** Primary health care. Occupational health. Workload. Health personnel.

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## IMPLICAÇÕES DOS MODELOS ASSISTENCIAIS DA ATENÇÃO BÁSICA NAS CARGAS DE TRABALHO DOS PROFISSIONAIS DE SAÚDE

**RESUMO:** Discute a influência de dois modelos assistenciais utilizados na atenção básica, nas cargas de trabalho dos profissionais de saúde. Pesquisa qualitativa realizada com equipes da Saúde da Família e do modelo tradicional que atuam no sul do Brasil. Para obtenção e tratamento dos dados usaram-se entrevistas, grupos focais e estudo documental, analisados combinando a Análise Temática de Conteúdo com os recursos do *software* AtlasTi. Evidenciou-se que, nos dois modelos, os problemas na organização e gestão da assistência, o excesso de demanda e a baixa resolutividade são as principais fontes de aumento das cargas e como fontes de redução, a afinidade com o modelo de atenção e o trabalho em equipe. Conclui que o aumento das cargas, na Saúde da Família, foi influenciado pelas lacunas entre o prescrito e o realizado, enquanto no modelo tradicional deveu-se ao próprio modelo assistencial baseado na biomedicina.

**DESCRIPTORIOS:** Atenção primária à saúde. Saúde do trabalhador. Carga de trabalho. Pessoal de saúde.

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## IMPLICACIONES DE LOS MODELOS ASISTENCIALES DE LA ATENCIÓN PRIMARIA EN LAS CARGAS DE TRABAJO DE LOS PROFESIONALES DE SALUD

**RESUMEN:** Analiza la influencia de dos modelos asistenciales, que se utilizan en la atención primaria, en las cargas de trabajo de los profesionales de la salud. Investigación cualitativa realizada con los equipos de Salud de la Familia y el modelo tradicional de trabajar en Atención Primaria de Salud en el sur de Brasil. Para la obtención y procesamiento de los datos se utilizaron entrevistas, grupos focales y estudios documentales, analizados mediante la combinación de un análisis de contenido con el *software* AtlasTi. Los resultados mostraron que en ambos modelos, los problemas de organización y gestión de la asistencia, el exceso de demanda y la baja resolución son las principales fuentes de aumento de las cargas de trabajo, por lo contrario como fuente de reducción de la carga laboral se presentaron la afinidad con el modelo de atención y el trabajo en equipo. Llegamos a la conclusión de que el aumento de la carga laboral en salud de la familia se vio afectada por la distancia entre lo prescrito y lo realizado, y en cuanto al modelo tradicional se debió a que este está basado en el modelo biomédico.

**DESCRIPTORIOS:** Atención primaria de salud. Salud laboral. Carga de trabajo. Personal de salud.

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## INTRODUCTION

This study focuses on health care models in primary health care in Brazil, understanding them as non-material technologies of work organization in health care. Furthermore, it studies the implication of these models on the workloads of health professionals.

The literature reveals that technology can be associated with products, materials and non-material “stuff” – work processes, which are certain concepts used for product generation and to organize human actions, including technologies of work relations.<sup>1</sup> The expression ‘technological innovation’ refers to changes of larger or smaller magnitude, and may represent a structural rupture or introduce improvements in a certain technological pattern, taking place in several sectors of production.<sup>2</sup> In this context, health care models are understood as technologies used at work to solve problems and the health care needs of individuals and communities, combining physical, technological and human resources.<sup>3</sup> A health care model consists of a dialogue between technical and political matters; it includes political and sanitary guidelines, as well as ethical, legal, organizational, clinical and socio-cultural principles that reflect a specific epidemiological reality and aspirations towards healthy living.<sup>4</sup> Some health care models are aimed towards medical-healing interventions, with focus on the individual and on diseases, while other health models seek to incorporate promotion and preventive actions, focusing on the subject in his family and social relationships under the perspective of comprehensiveness and interdisciplinarity.<sup>5-6</sup> Different health care models imply in different dynamics of work organization, impacting on workloads. The workloads here are seen as elements present in work that interact dynamically with each other and with the worker’s body and may cause wearing and disease in the professionals. Workloads can be classified as physical, chemical, biological or organic, mechanical, physiological and psychic.<sup>7</sup>

In primary health care, in Brazil, the two referred health care models are identified: the Traditional Primary Health Care, which is guided by biomedicine, aimed at caring for the individual by addressing the disease, especially the biological aspects, and on medical specialties; and the Family Health Strategy (FHS), which proposes to restructure the traditional model of care, focused on individual and community health, guided by the principles of the Brazilian Unified Health Sys-

tem (SUS, as per its acronym in Portuguese).<sup>6</sup> The first model is understood as a traditional technology and the second as a technological innovation.

These work organization technologies on health care have different perspectives and create different demands, with implications for the health professionals’ work, generating an increase or decrease in the teams’ workloads.

In this regard, this study investigates and discusses the influence of these two non-material technologies used in primary health care on the workloads of healthcare professionals that comprise the teams.

## METHOD

This is a qualitative study, supported by the theory of the Work Process and Occupational Health, performed in three municipalities located in southern Brazil, with teams from FHS and TPHC.

We used purposive sampling, which included: three teams from FHS and three from TPHC, referred by the regional directors of the Health Care System as teams that perform quality work and represent the typical work in both models; only health professionals in equal number in the two models and professionals with at least one year’s experience in the teams. The health care units that utilized both health care models were excluded.

The sample was composed of 22 health professionals, 11 from FHS (three doctors, three nurses, three nursing technicians, one dentist and one dental assistant/ ACD) and 11 professionals from TPHC (same number and professional category).

Data were collected from December 2010 to March 2012 through a documentary study, semi-structured interviews and focus groups. The study included documentary studies, which comprised productivity reports, records of staff meetings, epidemiological data and documents related to assessment and monitoring of the team’s work. The documents utilized were accessible through the Internet or made available by the directors of the Health System. The document analysis helped in understanding the health care models and work processes.

The interviews had the following guiding themes: the socio - political and institutional scenarios where team work was performed, their composition, the characterization of health care practices, the characterization of work organization and division of labor among the teams, in

addition to the identification of the influence of the two health care models on workloads.

To delve deeper into an understanding of the topic, focus groups were conducted in two Health Units (HUs), which were chosen because of being typical of the health care models under study. In each focus group three sessions were held, totaling about four hours per session. The roadmap of the focus group was built after the analysis of the interviews and included the following topics: sources of satisfaction and reduced workloads of health professionals, and sources of dissatisfaction and increased workloads.

The number of interviews and sessions of the focus group was satisfactory, as per data saturation.

For data analysis, Thematic Content Analysis<sup>8</sup> and the resources of the Atlas Ti 5.0 software were used, in combination. The speeches of the subjects were identified by the name of the professional category, in addition to FHS or TPHC and the order number.

Regarding the participation of the authors in the research, both participated in the study design; one performed the data collection and both performed the analysis and composition of the manuscript. We respected all ethical aspects required for human research and the project was approved by the Ethics Research Committee of the Federal University of Santa Catarina (UFSC), under protocol number 971/2010.

## RESULTS

The study was conducted in southern Brazil in an area that includes 15 municipalities, with 53 teams from FHS and 47 teams from TPHC. FHS professionals were, on average, 32 years old (minimum age 24 years and maximum age 39 years) and those from TPHC were, on average, 46 years old (minimum age 33 years and maximum age 59 years). Most subjects in both models are women, confirming the majority presence of women in health services.

At FHS, the average number of years of experience in the profession was 8 years. On average, the professionals had 3.5 years in this type of health model. At TPHC, the average was 18.5 years in the practice of the profession. The average was 14 years with the TPHC.

Regarding education at FHS, three professionals had completed secondary education, one had an incomplete higher education and seven had

completed higher education. Regarding training in graduate school, two professionals had specialized in Family Health and two specialized in the medical-surgical area. At TPHC, four professionals had a complete secondary education, one had higher education and the others had completed higher education followed by specialization in various areas, mostly in the clinical area and some with more than one specialization. Among the *lato sensu* courses, the following were found: specialization in clinical and administrative areas, in alternative practices (acupuncture, homeopathy) and only one professional in Public Health.

At FHS, all the professionals had a contract of 40 hours per week and 54.54% had another job. At TPHC 54.54% had a 40-hour contract (36.36% worked 30 hours a week and nine worked 20 hours). Among those involved in TPHC, 36.36% had another job. In both models, working two jobs was attributed to dissatisfaction with salary, the need to supplement family income and the search for improved social status.

Regarding employment, at FHS employees complete an entrance exam, while at TPHC nine are approved by entrance exam and two have temporary contracts. At TPHC, even those who were admitted through examination find themselves in an unstable situation, since the public examination was being questioned in court.

### Factors contributing to increased workloads at TPHC and FHS

With regard to increased workloads of health care professionals in both models of health care similar problems were noted. The most frequent was the excess of demand.

*Excess demand compromises the quality of care and causes dissatisfaction, in addition to the lack of preparation in the team (FHS 2 Physician).*

*The demand is very high, it greatly increases the workload. Sometimes it seems that you will not manage (Focal Group TPHC).*

The number of people seeking health care is incompatible with the number of professionals, structures, equipment and resources available at the HU. Moreover, in both models of health care, the following were identified: management problems; predominance of the biomedical paradigm; deficits in user embracement and in the organization and distribution of the activities; focus on medical consultation; poor service problem-solving ability; and excessive bureaucratic tasks.

With regard to management issues, the following factors resulted in increased workloads: strong political-party influence; insufficient financial and material resources (as well as bad administration of these resources); lack of qualified personnel; lack of continuing education and of incentives for professional qualification; problems in the referral service; and an absence of counter-referral.

*We realize that not even the manager really knows what it is [FHS]. Sometimes they ask for things that go against [the recommendations of FHS]. We realize the political influence (Focal Group FHS).*

*Another problem is the issue of counter-referral, which is difficult. We see that from one service to another the information is lost (Focal Group TPHC).*

In both care models there was a predominance of actions oriented by the biomedicine paradigm and problems in interpersonal relationships among team members, as well as with users and families, including verbal assaults made against staff.

*We have to refer to the doctor, because he/she is the one that the user needs to see (TPHC 2 Nurse).*

*[...] it is not easy because the thinking of the population is still geared towards making a medical appointment, they want to go through the doctor, to leave with their medicine prescribed or with their prescription under their arm. That's the hardest habit to break (Focal Group FHS).*

*[...] the user arrives at our health unit already assaulting [verbally] the health worker. He/she does not want to wait, he/she [the user] think his/her problem is more serious than everyone else's (TPHC 3 Nurse).*

The health professionals also highlighted the working conditions, pointing out the low wages and lack of recognition by users and directors.

*The salary is also very low, that is why I have to work two jobs (Nursing Technician TPHC 2).*

*The payment is poor, which greatly increases the load; we leave here very tired, because there are too many people to help, too much contact, too much demand and too little recognition (ACD FHS 1).*

### **Factors contributing to increased workloads at TPHC**

The sources of increasing workloads at TPHC were: lack of teamwork, distancing from the reality of users and families; the absence of a Community Health Agent (CHA); and the care focused on spontaneous demand, without investment in prevention, resulting at times in delayed diagnoses, which increases workloads.

*I see that [...] he/she [CHA] would suggest something that we cannot achieve because our work is performed almost entirely within the health care unit (Focal Group TPHC).*

*It is also no good when things [diseases] are very advanced and the diagnosis is too late (Focal Group TPHC).*

At TPHC, biological loads were strongly confirmed and these were also associated with physiological loads resulting from technical procedures, such as those performed by nursing and dental technicians which expose professionals to the risk of accidents and to get diseases due to systematic exposure to biological agents.

*I work with special patients who are HIV-positive [...] you are face to face with hazards all the time (Dentist TPHC 1).*

### **Factors contributing to increased workloads at FHS**

The most important factor increasing workloads at FHS was the lack of understanding of managers and users about the specificity of this health care model.

*The lack of understanding of managers about FHS is another factor that makes it difficult (Physician FHS 2).*

Other problems identified at FHS were: the team's exposure to urban violence; and the contract of 40 hours per week, considered excessive and exhausting for most subjects.

*So, 40 hours is quite demanding, isn't it for FHS?! It could be 30 hours (Focal Group FHS).*

### **Factors contributing to reduce workloads at FHS and TPHC**

Job satisfaction contributes to reducing workloads in both models of health care, particularly the affinity with the health care model and teamwork.

*The satisfaction is: to perform a good job [to care for people] as it should be; the way we organize the work [...]; in teamwork (Focal Group FHS).*

*I have an affinity for the work [we perform] here. Everybody gets along just fine; one helps the other; we help each other (Dentist TPHC 1).*

It was also mentioned that the schedule of activities contributes to reduced workloads and increased problem-solving.

### Factors contributing to reducing workloads at TPHC

In this health care model, the following contributes to reduced workloads: turnover of professional staff for the development of different technical activities, reducing exposure to biological and physiological loads, and flexibility in contracted working hours.

*I see that [working hours] 30 hours per week is good for the worker and for the service (Nursing Technician TPHC 1).*

*I have a certain freedom in my working hours; this is a condition for me to stay here [TPHC] (Physician FHS 1).*

### Factors contributing to reducing workloads at FHS

At FHS, the sources contributing to reduced workloads mentioned by the subjects were: proximity to the families' reality; the work of the CHAs; and freedom to organize and develop activities.

The principles advocated by FHS were mentioned as positive and, if implemented, would contribute to the reduction of the workloads and improve care, including user embracement.

*It is important when we can listen to the patient, shelter him/her. We feel that care is humanized (Nursing Technician FHS 1).*

*The satisfaction is in seeing the work of my CHAs, who are the best in the county. It is seeing that the families trust my team (Nurse FHS 3).*

## DISCUSSION

As for the profile of study subjects, TPHC's the professionals have more experience in this health care model. As mentioned in another study,<sup>9</sup> more experience seems to be a protective factor in regards to workloads.

The specialties of the professionals who participated in the study show distance from the training required to work in primary health care. This finding was more evident in the FHS model. The lack of specific training in this model can be explained by the fact that, until recently, there has been little public investment in training for FHS in the SUS.<sup>10</sup> At TPHC, professionals' specialization can be explained by the health care labor market, largely oriented towards biomedicine and driven by the desire for better financial compensation, which has also been shown in the literature.<sup>11</sup>

In relation to the employment contract, it was identified that there was dissatisfaction among the FHS' professionals with wages and the absence of a career plans and professional valorization.

Much has been debated about the importance of the 30 hours work week for the safety of healthcare professionals and users, which has been pursued by different professions, particularly nursing at the present time.<sup>12</sup> However, there is political resistance to this idea which, coupled with exclusive dedication, ongoing training and adequate wages, could contribute to reducing professional wear and would enhance the quality of care.<sup>12</sup>

The financial issue is also significant, both with regards to investments in physical infrastructure and materials in addition investments in the work force. It is required higher wages; a better selection of professionals to work in primary health care; incentives for training; in addition to career plans. These initiatives would favor more committed work and the strengthening of the professional-user bond.<sup>13</sup>

Problems in service and access to service; demands incompatible with professional numbers and abilities, as well as deficit in the physical structures and equipment available, showed the weakness in the universal access and in the comprehensiveness of actions in primary health care in Brazil. Another aspect highlighted in the two models studied was the strong influence of biomedicine, even when there is intent to change, as in the case of FHS.

Managers seem to be poorly prepared to reorganize services with a view to consolidating the SUS. Some of them appear more concerned about election campaigns than with the health of their citizens, and with groups with greater vulnerability.<sup>14</sup>

Studies point out that technological innovations imply structural changes of greater or lesser magnitude<sup>2</sup> and that in the initial implementation phase of an innovation, increased workloads often occur because workers need to be trained to work with this technology, especially non-material technology, such as in the FHS.<sup>15-17</sup> Most of the time, the process of innovation does not promptly replace the old way of doing things. After the adaptation phase, some authors claim that the adoption of innovation has rationalized processes and reduced workloads, and further brings health benefits to the users' health.<sup>16-17</sup>

As mentioned in the literature<sup>5-18</sup> we found problems in both models, which increased workloads and hindered the implementation of the

comprehensiveness of care: problems regarding the operation of the referral and counter-referral system; the focus on cure and few resolute actions. Literature also shows the importance of comprehensiveness as SUS's principle in order to achieve better resolution of problems in health care.<sup>18</sup>

It is urgent that a series of activities take place to qualify health professionals, with strengthening of the capacity for collective work, involvement with the health care model and enhancement of cognitive tools such as user embracement. It is believed that these strategies can reduce the dissatisfaction of users and professionals and strengthen empathy between them.<sup>19</sup>

The presence of biological loads at TPHC are significant, as well as the negative effects of urban violence in the context of FHS. These problems come from the service organization and macropolitical structure of the country, generating increased biological, physiological and psychological loads, as well as the wear of the professionals. The denial of the professional right to exercise his/her work in a safe environment and under safe conditions observed in this study was also found in other studies.<sup>9,20</sup>

The characteristics of the work at TPHC point to the need to break with this health care model, which prevents the realization of SUS principles since it overvalues medical healing practices and practices that are fragmented into specialties, with an excess of technical and medical procedures. However, FHS also has problems that jeopardize the teams' ability to engage in a new way of caring as recommended by Brazilian Health Reform and the SUS.<sup>5,21</sup>

The strengthening of policies such as the National Humanization Policy and the implementation of the proposals defined at the XIV National Conference on Health, such as strengthening social control, represent strategies capable of contributing to overcome the problems evidenced in the two realities in this research.<sup>13,22</sup>

To ensure the forward movement of changes that will allow the advancement of the SUS, it is necessary to stimulate a multifaceted social movement in defense of social protection policies, better use of resources and management agreement, with defined responsibilities and goals. Moreover, it is necessary to define micro-sanitary responsibilities in the reorganization of health work and the expansion of FHS coverage, incorporating technological innovations and technology into health services.<sup>22</sup>

## FINAL CONSIDERATIONS

The investigation has shown the complexity of the relationship between workloads, the context in which the work is done and the expectations of the subjects. At FHS the increased loads occurred mainly due to what was prescribed and how work was actually performed, while at TPHC this was caused by characteristics inherent in the own model of health care based on biomedicine.

Findings revealed important weaknesses in primary health care of structural, political and cultural order. These fragilities hinder the implementation of the practices recommended by the SUS negatively impacting the workload of healthcare professionals.

The study highlighted the need to change the model used by TPHC and to correct the problems existing at FHS.

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