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Organizational processes in the Family Health Strategy: an analysis conducted by nurses

Processos organizativos na Estratégia Saúde da Família: uma análise pelos enfermeiros

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Keywords

Health management; Primary health care; Family health strategy; Health services evaluation; Process assessment (Health care); Health policy

Descritores

Gestão em saúde; Atenção primária à saúde; Estratégia saúde da família; Avaliação de serviços de saúde; Avaliação de processos (Cuidados de Saúde); Política de saúde

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Abstract

Objective: To analyze the organizational processes of Family Health teams after implementing the Plan Director for Primary Health Care.

Methods: This cross-sectional study was conducted in the city of Unai, State of Minas Gerais, Brazil. A Likert questionnaire was used for data collection and the Kruskal-Wallis test was used for analysis, with a 5 % significance level.

Results: Better results were identified for the dimensions of maternal and child health, management contract and information systems. Unsatisfactory results were found in the dimensions: principles of primary health care, diagnosis, local programming, welcoming approach, risk classification, family approach, and relationship with the community, health care networks, monitoring, family health medical charts and diagnostic support. A statistically significant difference was identified in the dimensions principles of primary healthcare, local programming, monitoring, women's and child health.

Conclusion: Further investment is needed in team organization, particularly regarding organizational processes related to management.

Resumo

Objetivo: Analisar os processos organizativos das equipes de Saúde da Família após implantação do Plano Diretor da Atenção Primária à Saúde.

Métodos: Este estudo transversal foi realizado na cidade de Unai, no estado de Minas Gerais, Brasil. Um questionário do tipo *Likert* foi utilizado para coleta de dados e o teste de *Kruskal-Wallis* foi aplicado para análise, com um nível de significância de 5%.

Resultados: Foram identificados melhores resultados para as dimensões saúde da criança, mulher, contrato de gestão e sistemas de informação. Nas dimensões princípios da Atenção Primária à Saúde, diagnóstico, programação local, acolhimento e classificação de risco, abordagem familiar, relacionamento com a comunidade, redes de atenção à saúde, monitoramento, prontuário saúde da família e apoio diagnóstico, os resultados foram insatisfatórios. Nas dimensões princípios da Atenção Primária à Saúde, programação local, monitoramento, saúde da mulher e criança houve diferença estatística.

Conclusão: Há necessidade de maiores investimentos na organização das equipes, principalmente com relação aos processos organizativos ligados à gestão.

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Conflicts to interest: none to declare.



Introduction

Organizational processes in Primary Health Care (PHC) have been developed over the years in a variety of ways, from the perspective of political, social and cultural contexts of each country. Regarding the different types of PHC approaches, the World Health Organization noted, in 2007, essential elements to revitalize the capacity of the countries to develop a coordinated, effective and sustainable strategy of PHC in the Americas. The organization is one of those elements whose aim is to contribute to a broader and deeper implementation of the PHC model.⁽¹⁾

The Community Health Work Program (CHWs) and the Family Health Program- Programa Saúde da Família (PSF) were implemented in the 1990s in Brazil, with changes to the traditional model of care centered on the biological aspect, and from the individual to another that focuses on the community, with emphasis on health and its determinants.⁽²⁾

The CHWs program, a precursor of the PSF, sought to improve the health conditions of the communities, particularly the problems related to maternal and child health.⁽³⁾ The PSF, recognized as the Family Health Strategy (Estratégia Saúde da Família) (FHS), incorporated community health workers (CHWs) in the work of the team, and was considered a priority strategy for expansion of the services and actions of PHC in the country, focusing on the individuals, families and organized community, in a continuous, organized and comprehensive care.⁽⁴⁾

The Brazilian PHC policy proposed “an overarching” PHC model, in which the FHS acts as health system coordinator for the care networks, i.e. organizational arrangements of services and health actions to progress according to the coordination and integrality of care.⁽⁴⁾

In the FHS, all potential team members (physician, nurses, nursing technicians, CHWs, technicians, dentists, and dental auxiliaries) have common and specific assignments in the organizational process of actions.⁽⁴⁾ However, the difficulty of advancing these processes has been demonstrated due to different local contexts, which justifies the need to continue analyzing its development, as it can contribute to better performance and impact of the PHC actions on population health.⁽⁵⁾

In recent years, the State of Minas Gerais has been highlighted by its commitment to several changes, especially in the organizational process of the PHC teams. One of the initiatives was the implementation of the Primary Health Care Master Plan (Plano Diretor da Atenção Primária à Saúde - PDAPS), which occurred from 2007 to 2010, in 853 municipalities, whose aim was to cooperate on the reorganization of the municipal health systems, by strengthening the PHC and the construction of integrated health care networks.⁽⁶⁾

With the PDAPS, it was intended to implement an instrument for organizing the PHC, as well as medical charts for family health and health care guidelines; and clinical management, such as diagnosis, local and municipal programming, Manchester protocol for risk classification, and a management contract and monitoring system.⁽⁶⁾

Its implementation generated the mobilization of about 50,000 PHC professionals in the state. However, scarcity of publications to examine the effectiveness of the proposed amendments was evident. Accordingly, we sought to determine whether the PDAPS corresponded to expectations regarding the organizational processes, using a normative assessment, i.e., an assessment approach based on comparison of assessed components to established criteria and standards.⁽⁷⁾

Thus, this study analyzed the organizational processes of the FHS teams of a municipality of the state, after implementation of PDAPS, according to the following dimensions: principles of PHC, diagnosis, local programming, welcoming and risk classification, family health medical charts, family approach, relationship with the community, health care networks, diagnostic support, management contract, information systems, monitoring, and the health of women and children.

Methods

This was a cross-sectional study conducted after PDAPS implementation, in 2010, in the municipality of Unai, located in the northwest of Minas Gerais, with a population of 77,565 people. This municipality shares borders with the municipalities that make up the areas surrounding the Federal District and the State of

Goiás; thus it is an important strategic point for progress in the region.

The municipality of Unai was chosen because it is the head office of Regional Health Management (Gerência Regional de Saúde - GRS) and is a center in the northwestern portion of the state. It is composed of nine FHS teams, attending 46.2% of the population, a polyclinic for care of medical specialties, a hospital and an emergency care unit. The polyclinic and municipal hospital serve 12 municipalities in the northwestern portion of the state, and the GRS is responsible for mediating the agreement process. The most complex cases not served in Unai are forwarded to Brasília or reference municipalities in the state of Minas Gerais, such as Patos de Minas, Uberlandia, Uberaba and Belo Horizonte.

Such aspect requires, therefore, that the PHC in Unai is well structured, operates in resolute manner, and serves as a reference for the development of health services in the northwestern of Minas Gerais, in order to reduce the demand for more complex services.

A Likert questionnaire was used for data collection, developed and validated by the Department of Health of Minas Gerais (DH/MG - SES/MG) with the purpose of analyzing organizational processes after implementation of PDAPS. The questionnaire consisted of 129 checklist items, and comprised the dimensions mentioned above. Chart 1 presents the themes addressed in each dimension.

The questionnaires were self-administered by nine nurses from the FHS, because of the attribution of the team manager. Each item had four answer options with scores ranging from 0 to 3, whose value had a meaning allowing the identification of the developmental stage of the health team's organizational process. The nine participants were informed that the score 0 meant no implementation of the analyzed item; score of 1, incipient implementation (early stage); score of 2, advanced (process in development, but neither in the early nor in the ideal stage); and score of 3, optimal (ideal and consolidated way). Evaluation of the organizational processes was conducted by means of this instrument to verify if the optimum stage was achieved, which was the objective of the DH/ MG after implementation of PDAPS.

The mean and median scores were used for data analysis of each dimension and its items. As the mean and median were different, demonstrating that there was no normal data distribution, the median was chosen as a more accurate parameter for analysis.

The Kruskal-Wallis test was used to compare the implementation of organizational processes by teams, with a 5% significance. This test was not applied for local diagnosis, diagnostic support, information systems, family approach or relationship with the community, as they had less than five items, which would decrease the power of the statistical test. Statistical analysis was performed using the *Statistical Package for the Social Sciences*.

Chart 1. Dimensions and themes addressed in the inspections

Dimensions	Themes addressed
PHC principles	Knowledge and structuring in professional practice.
Diagnosis	Annual (re)enrollment of the population, classification of families according to risk, use of distribution maps of disease, and risk situations in the territory.
Local programming	Implementation of guidelines and protocols, risk stratification (hypertension, diabetes, pregnant women, children, adolescents, adults, elderly, and oral health), structuring and execution of programmed actions.
Welcoming and risk classification	Using principles of welcoming, Manchester Protocol implementation, and organizing the schedule for spontaneous and scheduled care demands.
Family health medical charts	Use of medical charts classified according to risk, implementation of the electronic version, confidentiality of information and assessment records.
Family approach	Application of genogram instruments and lifecycle families.
Relationship with the community	Team participation in the Local Council and district health meetings; interaction, dissemination of actions and outcomes to the community; knowledge and professional relationship with the best-known people in the community.
Health care networks	Knowledge of reference protocols for secondary and tertiary care, access to laboratory tests and imaging, regulatory system and users transport in the network, agreement with other points of care.
Diagnostic support	Implementation of clinical laboratory protocols, planning the amount of testing by the teams, and organization of the procedural flow before and after the examinations.
Management contract	Professional knowledge of municipal goals established in the contract; pact of local indicators and targets; monitoring the goals related to prenatal care, vaccination and cytopathology testing in women 25-59 years of age; and contracting with the teams for municipal coordination.
Information systems	Frequency of insertion and use of data in action planning.
Monitoring	Knowledge of the goals established for APS municipality, preparation of monitoring proposal of goals, organizational processes to achieve the goals, achievement of monitoring as planned.
Women's health	Actions taken to guarantee sexual and reproductive rights, prenatal, postpartum, prevention and control of breast cancer and cervical cancer, and menopause.
Children's health	Actions in the first week of life for child, growth and development, vaccinations, and healthy eating.

The study was submitted and approved by the Research Ethics in Health Committee of the University of Brasilia, protocol No. 158/10, according to national and international standards of research ethics. Signing of the terms of free and informed consent was not necessary, as the data was provided by the Municipal Health Bureau.

Results

For classification purposes, the dimensions of maternal and child health were defined as organizational processes related to health care, and the others as belonging to the management area, that is, related to the actions necessary for the organization of PHC and clinical management the FHS.

Tables 1 and 2 show, respectively, the results of the dimensions related to management and health care. A statistical difference was identified among the teams for the principle dimensions of PHC, local programming, monitoring, maternal and child health ($p < 0.05$).

Table 1. Median, mean and p-value for the dimensions related to the management of organizational processes in the family health strategy

Dimensions	Number of items analyzed	Scores		p-value*
		Median	Mean	
FHC principles	05	1	1.4666	0.015
Local diagnostic	04	1.5	1.6111	Not calculated
Local programming	12	1	1.4722	0.000
Welcoming and Risk classification	05	1	1.5333	0.375
Family health medical charts	05	0	0.8	0.165
Family approach	02	1	1	Not calculated
Relationship with the community	03	1	1.1111	Not calculated
Health care network	07	1	0.8730	0.107
Diagnostic support	03	0	0.3333	Not calculated
Management contract	06	2	2	0.107
Information system	02	2	2.0555	Not calculated
Monitoring	05	1	1.1777	0.000
Total	59	1	1.31	0.000

*Kruskal-Wallis test $p < 0.05$

In addition, in the diagnosis dimension, the existence of the process for annual registration and classification in an advanced stage was verified, according to the risk of the families, in the territory of the team's performance.

In the local programming, an incipient structure of the work plan was identified; however, advanced execution was evident. The risk stratification for pregnant women, children, adults, elderly, hypertensives and diabetics was considered advanced; for adolescents, it was incipient; and oral health was not implemented.

The welcoming and risk classification, and family health medical chart dimensions, respectively, the Manchester protocol and the electronic version of the medical chart were not implemented.

Regarding the health care networks, scarcity of access to laboratory tests was identified; and in the management contract dimension, the establishment of actions to comply with cytopathology targets in women of 25-59 years of age, was in the optimum stage of implementation.

Despite the advanced result for women's health, incipient implementation was detected in actions for menopause, choice of contraceptive method, caring for HIV positive pregnant women, dental care for pregnant women, and use of information systems for control of breast cancer. Dental care was not implemented in the children's health dimension.

Table 2. Median, mean and p-value for the dimensions related to health care in the organizational processes of the family health strategy

Dimensions	Number of items analyzed	Scores		p-value*
		Median	Mean	
Women's health	40	2	2.025	0.000
Child's health	30	3	2.4111	0.000
Total	70	2	2.19	0.000

*Kruskal-Wallis test $p < 0.05$

Discussion

This research was limited to analyzing the organizational processes in the FHS, such as the instrument developed by DH/MG, and did not include health care processes in all of the life cycles. The method adopted did not show why some PDAPS elements were less successful in their implementation. The evaluative instrument needs to be expanded to clarify points not addressed.

Challenges were verified in the development of organizational processes in PHC, mainly related to care management. The results are similar to some situations identified in the PHC structure in Latin America.⁽⁸⁻¹⁰⁾

Not all of the cases examined achieved their optimal stages, but PDAPS presented itself as a strategy for implementation, assisting nurses, who mainly assume the manager role of the FHS teams.

The PHC principles are used in the foundation of the FHS.⁽⁴⁾ Favorable results are highlighted for its implementation in FHS units, however, contradictions are identified in the establishment of some principles such as longitudinally, community guidance, among others.⁽¹¹⁾

The incipience in this dimension confirms a study that identified an inappropriate level of apprehension and knowledge of the principles and guidelines of the FHS, demonstrating difficulty of progress towards its implementation.⁽¹²⁾

These data demonstrate that continuous education for FHS teams is necessary, such as specialization degrees and residency programs in family health, for optimizing the approach of the health-disease process. However, it is essential that actors and institutions responsible for education of mid-level professionals and higher education work to strengthen the principles of PHC in the practice of future professionals.⁽¹¹⁾

With regard to the local diagnosis, the results detected on the registration of the territorial population and the risk stratification of families, reinforces the importance of the CHWs as members of the health team, as recommended by the national primary health care policy of Brazil.⁽⁴⁾

The incipient result of this dimension indicates that the moments of the work process can be more exploited for data collection and updating of the territory/families. This is in line with research that identified little knowledge of the history of health and living conditions of the customers and families by FHS professionals.⁽¹³⁾ Such situations implicate in the recovery their meaning for healthcare practice, in order to establish planning that is coherent with the social, economic and health reality.

In the local programming dimension, the incipient development of the action plan, but with advanced execution, indicates a trend in valuing the realization of actions more than the planning. The results obtained in the implementation of the guidelines and validated clinical protocols reinforce the imbalance in the use of these theoretical tools in

professional practice, disadvantaging the resoluteness of health actions.

The existence of a guideline does not guarantee its adoption by professionals; this is more influenced by the individual characteristics and beliefs of the institution than the training received.^(14,15) Problems related to its adherence by the FHS are identified.⁽¹⁵⁾ The implementation of strategies can contribute to its adoption in the PHC, improving the quality of care and patient safety.⁽¹⁶⁾

The advance of risk stratification for children, adults, elderly and chronically ill demonstrates that it is possible to classify risk and plan actions, an important aspect to address the trends of the elderly people and the changes in the epidemiological profile of the communities. The incipient results regarding adolescents suggests greater involvement of the school and parents in order to optimize care.⁽¹⁷⁾

The incipient result of the welcoming and the non-implementation of the Manchester protocol, indicate the need to move forward with the humanization of care. Welcoming with risk classification prioritize patients who need immediate treatment or acute conditions, reinforcing the principle of equity in the FHS, however the scientific production in Brazil is scarce.⁽¹⁸⁻²⁰⁾

The family health medical chart does not exist in an electronic version, which could facilitate the knowledge about the patient, provision of longitudinal care, flow of clinical information, coordination and integration in the network of health care.⁽²¹⁾ Furthermore, it would reduce errors in pharmacological treatment and diagnosis, which are frequent incidents affecting patient safety in the PHC.⁽²²⁾

Despite the establishment of ministerial ordinance No. 529/2013, the need to expand the patient safety culture and processes are recognized, ensuring safety information in electronic systems, preventing medical errors and subsequent legal problems.⁽²²⁻²⁴⁾

Concerning the family approach, the incipience found shows care without adequate depth in terms of knowledge of family problems and their possible causes. It can be reflection of the work processes, focused on the disease and the

individual, a common problem in Latin American PHC, because despite the advancement of the family medicine model, greater commitment to implementing the required changes is required.^(10,25)

The incipient result in the relationship with the community shows that greater mobilization is required to stimulate the development of autonomy of the citizens in the care of individual and collective health. This action may have an impact on addressing determinants and health conditions, the organization of services and the social control, objectives recommended by the Brazilian policy for primary care.⁽⁴⁾

The fragile relationship with the community can be a reflection of the action based on the model of health predominantly focused on disease. To move forward, the creation of spaces for relationship with people is necessary in the daily routine of professionals, as self-motivation to design actions that stimulate communication.⁽²⁶⁾

The FHS, in Brazil, contributes to effectiveness of the networks because of its capability to coordinate the patient's care and integrate the services, as the points of secondary and tertiary referral are first established and sufficient for the demand.⁽²⁷⁾ A progress in the development of networks was identified in Minas Gerais, as occurred in the northern regions, and in Belo Horizonte, showing an ability to overcome challenges to its implementation.^(28,29) In Unai, the incipient result indicates a weak PHC connection with the points of care, showing the need for greater efforts to ensure a comprehensive care to the customer.

To promote access to health actions and services, Ordinance No. 4,279/2010 of the Ministry of Health introduced guidelines for the development of health care networks, and presidential decree No. 7,508/2011 reinforced the importance of regionalized and hierarchical networks.⁽⁴⁾

Organizational processes to support laboratory diagnostics were not implemented according to the analysis criteria of this study. However, the municipality used other ways for development of opportunities for patient access to laboratory tests,

a statement justified by the incipient results found in this aspect in the network care dimension. Thus, to ensure access to services and progress in the structuring of the care network, the organization of diagnostic support depends on the sufficient supply of exams.

The management contract was considered the major innovations in the reform of public management, focused on the results with contributions for change in the quality of public services.⁽³⁰⁾ Although the advanced results of this research, the use of this management contract is understudied in the public health.⁽³⁰⁾

According to the results, the negotiation of targets in this contract may have contributed to a better performance of the information systems dimension, which were in the prevention of cervical cancer (target agreed by the management contract - median 3) when compared with the control of breast cancer (target not agreed by contract - median 1). Thus, the implementation of the management contract can benefit the skills of information systems and therefore the monitoring process, an incipient dimension in this research. Other targets are suggested to be included in the management contract to increase the accountability of professionals regarding desired results and monitoring for improvement.

For the maternal child health (health care area), the advanced and optimal results, respectively, indicate a historic achievement of better organization of these segments, mainly due to the implementation of the CHWs program in the country in the 1990s.⁽³⁾ However, in the city studied, the need to advance some organizational processes related to maternal health was verified, according to the results presented, aiming not to affect treatment adherence.

Regarding oral health, difficulty for risk stratification was evident, as well as the implementation of follow-up actions for pregnant women and children. Failure to incorporate these actions into the FHS does not reflect the Oral Health Policy of Brazil, which assumed new contours in the PHC, especially in the period of 2003 to 2010.⁽²⁾ Such finding shows an urgency to establish actions in the

routine of the teams about this subject, which could strengthen the interdisciplinary work of the FHS professionals.

When comparing the implementation of organizational processes with the application of statistical tests, different degrees of mobilization and engagement of the teams in the dimensions of PHC principles, local programming, monitoring, maternal and child health was found. This data shows that, despite the teams working in health units subject to the same PHC coordination, they may not be following the same pattern for the development of actions, which may cause worse outcomes for the health of the population in certain territories. Therefore, the involvement of health professionals is critical for the quality of care and the renewal of the current PHC model.

The limitation of this study was the small sample and representing the reality of a certain place at a certain moment in its history, but contributing for indicating the most structured dimensions, as well as those in need of investment related to organizational processes in PHC. It is expected that the results and reflections presented may stimulate the improvement of political and administrative strategies related to organizational processes in PHC, in order to optimize the performance and the impact of health actions.

Conclusion

In the nurses' analysis, the PDAPS has improved the organizational processes related to the area of health care; however, the management-related processes were incipient, which shows the need for greater investment in the organization of the local system of the FHS.

Collaborations

Arantes LJ and Merchán-Hamann E contributed to the planning, analysis, interpretation of data, drafting and improvement of the article. Shimizu HE collaborated with the critical review of intellectual content and final approval of the version for publication.

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