EFFECTIVENESS OF PRIMARY CARE ACCORDING TO HEALTH PROFESSIONALS AND THE PROGRAM MORE MEDICAL

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ABSTRACT

The study had as objective to evaluate the effectiveness of primary care, identifying the distinctions between the models of services with the family health strategy in comparison to traditional basic units, with and without professionals of the program more medical. Quantitative research, evaluative, performed with 128 professionals - physicians, nurses and coordinators of primary care units, by means of the instrument Primary Care Assessment Tool (PCATool - Brazil) version to health professionals, in 2015 and 2016 and adopted inferential statistical analysis. The results indicated scores above 6.6 on those units that adopt the family health strategy and below the cut-off point in the basic units of traditional health. Coordination- information systems (6.6) and longitudinally (6.2) showed low effectiveness of services in traditional health units. The access obtained a low score (4.0), in both models. The evaluation of the primary care in different models of services revealed that the health actions and services offered in the municipality were more effective when performed in family health units, in comparison to traditional ones, regardless of the presence of professionals in the program more medical.

Keywords: Primary health care. Health human resources. Health services evaluation.

INTRODUCTION

In a context marked by the attempt of reorganization of Primary Health Care (PHC), on the national scene, with new edition of regulatory decree, the possibility of expanding its effectiveness and resolvability is threatened(1). In its broader conception, can understood as the first level of users' access to the health system and coordinator of other levels of care, essential element in a continued process of care. Furthermore, the PHC encompasses actions and services of prevention, promotion, protection, and rehabilitation to the health needs of individuals, families, and communities(2).

In Brazil, the National Policy of Basic Care reformulated by Decree number 2436/2017, puts the universal coverage provided for in the Unified Health System, segmentation, modifies the composition of health teams, reorganization of the work process, and weakens further the coordination of services by PHC(4), explaining the importance of studies that compare the models of attention as the accomplished.

Given this scenario of regression of the conquered, the recognition of the Family Health Strategy as a priority for the reorientation of the care model in the health system has lost its importance, even in the face of evidence, as in our study, which operates the principles and guidelines of the PHC to more consistent and egalitarian than the traditional model. Alternatively, ifa process of loss of a full PHC, which was aimed at greater effectiveness and impact on the health status of the population(1).

Historically, Brazil has lived with two prevailing models of health care in the PHC. The biomedical model, developed in basic health units, and the epidemiological-sanitary model of prevention and promotion of health, developed from the Health Reform, since the decade of 1980, whose attempts at expansion took place by means of the family health units. Although there is a predominance of the two models, it is still having traditional units in a mixed model with the family health geared to the PHC(3) and, contrary to the model, family health units working with focus on the biomedical model.

The claim with the implementation of the family health strategy throughout the national territory was to change the focus on the disease and on the individual, take the focus on curative actions, treatment of diseases, medicalization, changing to health practices considering the determination of health-disease process, where as the individual in your family and community context and with actions that involve the surveillance and health promotion(5).

Since its establishment, efforts were made in different spheres of management and with different actors in the national scenario, in order to promote the expansion and implantation of family health units, to improve the access and resolvability to users. According to the Ministry of Health, our country has reached the estimated proportion of 60% coverage of family health...
teams, throughout the national territory. However, since the change of government, the strategy has lost space and no longer be considered relevant, since its role was left aside in new PHC policies(1).

Associated to this fact has become the problem of financing in the health sector in our country, which, since the establishment of the National Health System was never effectively resolved, since it does not indicate the source of resources for health, as a public policy established in the constitution. In addition, recent legislative changes as the Constitutional Amendment number 95/2016, which froze for 20 years the allocation of public resources, producing effects in various policies and specifically in the financing of health system(1).

Thus, a model of health attention considered effective, efficient, and appropriate to the strengthening of the PHC in the country, the family health strategy, may suffer the impacts of these changes. Another important obstacle to its strengthening added, which is, the availability of human resources, resulting from changes in the work process and composition of teams(1), especially in medical work, the theme of this paper.

In the face of difficulties in the provision of medical care in the PHC, prior to the change of government and subsequently of the PHC policy, the previous administration drew up the program more medical (PMM), whose actions involve the training and qualification of the professionals to act in national health system, and mainly in the PHC(5), instituted by Law number 12.871/2013, adopted three strategic fronts: more jobs and new medical courses with curricular guidelines reviewed; investments in the construction of primary care units, and provision of Brazilian and foreign physicians to units of PHC(6).

In this context, we present the results of research whose objective was to evaluate the effectiveness of primary care, identifying the distinctions between the models of services with the family health strategy in comparison to the traditional basic units, with and without professionals of the program more medical.

**METHODOLOGY**

Quantitative and evaluative research, developed with medical professionals, nurses and coordinators were active in 14 teams of traditional health units and 35 teams of family health strategy with and without the presence of physicians of the program more medical (PMM), located in urban and rural areas of medium-sized municipality in the Western region of Paraná.

The data collection instrument was applied to 128 professionals, being 51 nurses, 17 coordinators and 60 physicians (of these, nine were belonging to the PMM). Data collection comprised the period from November 2015 to April 2016.

The data were obtained at the health units, with previous schedule with the professionals, using the instrument for evaluation of Primary Health Care - Primary Care Assessment Tool (PCATool) Brazil, professional version. This is an instrument of evaluation of the PHC validated in Brazil, based on Donabedian model for evaluating the quality of health services, measures aspects of structure, process, and results of health services(7).

It is composed of 77 items divided into eight variables(7), being four essential attributes: Access to First Contact (Accessibility)- 9 items; Longitudinality -13 items; Coordination(Information Systems)- 3 items; Integrity (Available Services)- 22 items; Integrity (Services Rendered)- 15 items; and two attributes derived: Community Orientation - 6 items.

The PCATool - Brazil version for health professionals has a range of responses from the Likert scale (4=certainly yes, 3=probably yes, 2=probably not, 1=certainly not), with the addition of the option '9=do not know/not remember'. From these responses, it is possible to calculate a score for each attribute of the PHC (and its components), also an essential score, and an overall score. The scores for each attribute (as well as its components) are obtained by the arithmetic average of responses of their respective items. The Essential score is the arithmetic average of the scores of the essential attributes and the overall score defined by the arithmetic average of the scores of the essential attributes and derivatives(7).

To transform these scores on a scale from zero to ten, we used the formula: (score obtained -1) x 10 / 3. The score equal to or greater than 6.6 is considered high score of PHC. This value was adopted by match, on a scale of 1 to 4, the score 3, equivalent to option 'probably yes'(7).

The obtained data were tabulated and analyzed in the form of descriptive and inferential statistics, presented in tables and graphs for comparison with the available literature about the theme in question. The domains of the instrument PCATool were evaluated in relation to the statistical assumptions of normality (Shapiro-Wilk test) and homoscedasticity (Levene
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test), and then compared between the family health units without PMM, with PMM and traditional ones by means of analysis of variance tests of single-factor or Kruskall-Wallis (x^2=0.05). In case of statistical significance, it performed the test of Tukey follow after ANOVA or the Dunn's test after the Kruskal-Wallis test. All analyses were performed assuming a significance level of 0.05, with the aid of the software for analysis of quantitative data XLStat, version2015.

The study was submitted to the approval of the Ethics committee in Research, approved under the document number 1,219.464, CAAE: 47147245215.4.0000.0107. All participants signed the Informed Consent Form after to accept participating in the research.

RESULTS

In Table 1, we present the scores of the attributes of the PHC, highlighting the differences between the

Table 1. Comparison of the attributes of PHC, according to the professionals, between the Family Health Units without PMM, with PMM and traditional units. Cascavel, PR. 2017

<table>
<thead>
<tr>
<th>Attributes of PHC</th>
<th>Family Health Units</th>
<th>Traditional Units</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without PMM (n=46)</td>
<td>With PMM (n=31)</td>
<td></td>
</tr>
<tr>
<td>Essential Attributes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>4.039 ± 1.298</td>
<td>4.289 ± 1.314</td>
<td>4.350 ± 1.419</td>
</tr>
<tr>
<td>Longitudinality</td>
<td>7.162 ± 1.441</td>
<td>7.039 ± 1.476</td>
<td>6.275 ± 1.328</td>
</tr>
<tr>
<td>Coordination-Integration of care</td>
<td>7.371 ± 1.265</td>
<td>7.481 ± 1.370</td>
<td>7.152 ± 1.495</td>
</tr>
<tr>
<td>Coordination - System Information</td>
<td>6.659 ± 1.934</td>
<td>6.653 ± 2.634</td>
<td>5.850 ± 3.031</td>
</tr>
<tr>
<td>Completeness-Available Services</td>
<td>8.241 ± 1.099</td>
<td>8.018 ± 1.439</td>
<td>7.323 ± 1.266</td>
</tr>
<tr>
<td>Completeness-Services Rendered</td>
<td>8.229 ± 1.373</td>
<td>8.218 ± 1.185</td>
<td>7.938 ± 1.554</td>
</tr>
<tr>
<td>Derived attributes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Orientation</td>
<td>7.919 ± 1.424</td>
<td>7.127 ± 1.888</td>
<td>6.662 ± 2.003</td>
</tr>
<tr>
<td>Community Orientation</td>
<td>7.851 ± 2.061</td>
<td>7.389 ± 2.023</td>
<td>7.666 ± 1.935</td>
</tr>
<tr>
<td>Essential Score</td>
<td>6.950 ±0.910</td>
<td>6.950 ±1.059</td>
<td>6.481 ±1.049</td>
</tr>
<tr>
<td>Overall Score</td>
<td>7.184 ±0.972</td>
<td>7.027 ±1.086</td>
<td>6.652 ±0.996</td>
</tr>
</tbody>
</table>

Different letters indicate statistical significance (p<0.05) in the comparison between the units.
* Analysis of Variance - single factor, followed by Tukey's test
** The Kruskal-Wallis test followed by Dunn's test

Regarding the accessibility attribute, in the two models of units there was no orientation to the PHC, since the scores approached to 4.0, far away from the cut-off point of 6.6. No significant statistical difference was identified (x^2=1.17; p=0.56).

In relation to the longitudinal, was adequate in the family health units, above 7.0 and with statistically significant difference when compared with the other kind of units (F1, 126=9.813; p=0.00216), being the score of traditional units significantly smaller (6.2).

There was no statistically significant difference for the variable Coordination -Integration of care when the units were compared (F1, 126=0.634; p=0.428), with scores above 7.0. For coordination - information system, there was a difference between the models (x^2=4.8937; p=0.09), with the family health units in the cut-off point of 6.6 and the traditional ones below, with 5.8.

In the variable Completeness – Available Services, in the traditional units the score was significantly lower than that of the family units (F1, 126=13.76; p=0.000311). As the same variable, but referring to Services Rendered, there was no statistically significant difference (F1, 126=1.06; p=0.305).

About the Family Orientation, in the comparison of the units it is observed a statistically significant difference (F1, 126=11.99; p=0.00073), with scores for the traditional ones smaller than in the family units.

There was no statistically significant difference in relation to the variable Community Orientation (x^2=0.5436; p=0.76).

In Graphs 1 and 2, it was observed the scores of the essential attributes and general, comparing the different models of care.
Graphs 1 and 2. Comparison of essential and general scores between the Family Health Units without PMM, with PMM and traditional units. Cascavel, PR, 2016.

There is a significant difference in the Essential score among the units ($\chi^2=5.111; p=0.08$), with the values smaller in the traditional units than in the health family units. For the Overall score the difference was not repeated.

DISCUSSION

The results of this study show that traditional units, in all evaluated attributes, not received orientation to primary care, while family health units, regardless of the PMM shelter, had adequate degree of orientation and presence of essential attributes and derived from the PHC. However, the overall score, in the two models showed values above 6.6, being appropriate to the fulfilment of the attributes of the PHC.

The essential attribute Access to first contact, refers to the availability of access and the use of health services by the users, whether for a new health event or for a new episode of the same event. Understood as an entrance door to the healthcare system, the service must be recognized both by individuals and by the team as the first place to search by the population to come across a health need. The analysis of this attribute identified mean scores below the cutoff point in the two models, indicating that traditional units and health family units offered equivalent services, lower than expected, in relation to the effectiveness of this attribute. This fact is surprising in the family units, as if waiting for the scheduled
access of the population to health services, in addition to the attention to spontaneous demand that might exist. However, this is also a problem of traditional units, which needs to be resolved in both models. With the change in the national policies, it constitutes a challenge, because to keep the two models, possibly access remains limited.

Therefore, with the limitation of the priority given to the family units, PHC will continue having trouble for its strengthening as an entrance door to the healthcare system. Because, although protrude the benefits that the family strategy and the PMM developed in the national scenario, in what refers to the breadth of coverage of the program, users' access is still restricted by the organizational characteristics of the work process, the composition of the teams, the coverage of community health agents, the characteristics of management services in the municipalities, now accentuated by new national policy.

About the longitudinally, understood as the relationship of bond established over time between health professionals and users, its analysis allowed the identification of the existence of a continuing source of attention, represented here by the health family units, portraying the quality in the services provided on the basis of this attribute. This can be considered a change of scenery, when compared to a study conducted in the same municipality with users-relatives of children, in which this attribute not received orientation to the PHC in these units, being better evaluated in the traditional ones, which can be explained by the presence of pediatricians in these units, and demonstrating the need for changes in the working process of the health family units for improving the quality of care.

In contrast, a study conducted in João Pessoa, in Paraíba, found similar results for the longitudinally, with orientation to the PHC in the health family units. However, exactly on the average, recommending more investment from the services in order to strengthen the bonding of individuals with these units.

Another study about this attribute has demonstrated that longitudinally means to establish therapeutic relations independent of diseases. Furthermore, revealed a lack of confidence; no accountability; absence of warm reception; bond established with a single professional, resulting in the choice of emergency care for assistance instead of PHC. In other words, there were weaknesses in longitudinally, implying the need for changes in the process of PHC process of structure.

Being among the fundamental principles of the operationalization of the family strategy, the longitudinally, in addition to the structural issues, organizational and interaction with the other attributes of the PHC, requires from the professionals a distinct posture than usual, that is, going beyond the biomedical model, with full look, leading to knowledge of demands that emerge when there is an effective link, reinforced by follow-up over time and that are reflected in the quality of the assistance offered by the family health units.

In the municipality and in the study period, the insertion of the PMM professionals in the family units contributed to positive evaluation of the attribute longitudinally, to the extent that instituted the allocation of physicians in under served locations of these professionals. However, the time of permanence in the program limited to three years, may present itself as a difficulty in the orientation of this attribute to the PHC, bearing in mind that the rotation of professionals directly affects the breaking of bonds established between the user and the physician. In this way, it is necessary to strengthen the bond with the service, with all the professionals of health staff and not only with the physician.

Another essential attribute evaluated, the integrality, refers to the actions that the health service should offer to ensure that users receive full attention, both from the point of view of the biopsychosocial nature of the health-disease process, as actions of promotion, prevention, cure and rehabilitation in the context of the PHC, taking into account the determination of health-disease process which influence the quality of life and health of users.

The analysis of this attribute revealed that the units of PHC have offered actions and basic services in health, which makes possible the realization of qualitative actions for the population. However, restrict the integrality of the availability of services; it would be equivalent to not offer a full attention. The significance of the integrality goes beyond the issue of ensuring assistance to users between the points of attention when necessary, presupposes the development of actions that understand in its entirety, providing suitable childcare, dignified and humanized assistance.

However, a study conducted in João Pessoa, in Paraíba, found that the attribute completeness was not satisfactory scores in two dimensions assessed - available services and services provided, indicating that the low scores show that the attribute does not have the
expected extension to a PHC service, being necessary changes as the restructuring of services, seeking intersectoral linkages in the supply of health care and the enhancement of relations between professionals and users in order to promote an effective and integral dimension caregivers\(^{(16)}\).

The essential attribute of **coordination** of care refers to the capacity of professionals and staff in identifying the needs of its users; organize the attention effectively, referencing the other points of attention when necessary and integrate the obtained answers to all needs of individuals\(^{(12)}\). In this study was assessed by professionals as directed to the PHC, except for traditional units. In a study that covered mixed units of attention, which are those that aggregate in the same structure, the health family strategy and the traditional care. This same principle also met oriented to the PHC, corroborating our findings in relation to the family units\(^{(17)}\).

For this reason, it is necessary that both teams in their work process, as well as the services that constitute the network of attention, are organized and structured to promote greater effectiveness of assistance. Promote the coordination goes beyond the reorganization of work process of health teams, it is necessary also to the incorporation of tools and devices of attention by management that allow greater communication among professionals, fluidity of information and agility and efficiency in customer service. These unfeasible assumptions by the new national policy\(^{(11)}\).

In the essential score for each group, it was identified that family health units demonstrated mean above the cutoff point established, giving guidance to their principles. However, the traditional units obtained average below the cutoff point, portraying low effectiveness of their actions, being identified a statistically significant difference between both. In contrast, a study conducted in the Federal District found that the attributes of access, longitudinally, comprehensiveness, and coordination are limited in the theory and practice of professionals, in both models of attention, indicating that both demand deepening of organizational processes of integral health\(^{(18)}\).

In relation to the **attributes derived** for the **family orientation** the two models of services geared to the PHC, because both reached the cutoff point set. The comparative analysis among the units studied showed that there were differences \((p=0.0001)\) between the effectiveness of health actions in the PHC, with family health units with higher average when compared to the traditional units.

In a study carried out in a municipality in the north of Paraná, on the contrary, the authors found low adherence to family guidance and community attributes in family health units and in traditional units that grouped a mixed model with both, indicating the need for a focus on the family health model to obtained success in their practices\(^{(19)}\). On the other hand, in a study comparing mixed model, family health units and traditional ones, the authors found no statistically significant difference for the attributes derived in favor of models that operate with the family time in relation to the traditional model. The family units showed higher scores for family and community orientation\(^{(15)}\).

Another study developed in Paraíba with families of children, found weak orientation of derived attributes in the family health units. The mean scores for the components analyzed obtained values 3.7 and 5.7, below the determined for that are oriented to the PHC, indicating the need for a comprehensive look into the subject, with macro and micropolitical conceptions of planners and managers of health care, in order to ensure effectiveness of child health care\(^{(20)}\).

Despite the essential attributes have had less value in the traditional units, as well as the access was not adequate score, the professionals of the PHC in this study evaluated that the PHC complies with its attributes. Contrary to this perception, studies\(^{(9,17,20)}\) conducted with users of the service covering the same municipality has demonstrated that, for anyone who uses the principles of PHC were not followed.

Finally, in a study that evaluated which model of attention, between traditional units and those with family strategy, is more oriented to the PHC for children, considering the presence and extent of essential attributes and derived from the PHC, found the mixed units, which bring together the two models, such as more targeted, indicating the need to recast in the form of performing services for an integral attention and quality\(^{(9)}\).

Thus, it is clear that the primary healthcare services in Brazil are heterogeneous regarding the presence and extent of essential attributes and derivatives in attention to health, requiring structural and procedural changes in services; in order to better plan the care actions in PHC\(^{(9)}\).

**CONCLUSION**

The evaluation of the PHC in different models of attention, from the point of view of professionals working there, revealed that the health actions and
services offered in the municipality of the study have considered effective and quality when running in family health units, with significant difference in relation to traditional ones.

The presence of professionals in the PMM is not statistically significant in determining the scores evaluated, showing that, in relation to the expansion of access, this has not occurred because of the implementation of the program in the municipality of study, because it was the worst attribute evaluated by professionals. In addition, there was no evidence of differences in other attributes evaluated in comparison between the teams that have professionals in the PMM and those who do not have them.

It is, therefore, the need for further research about this theme, as well as the realization of evaluative research with other subjects, such as users, a limitation of the study, as a way of identifying aspects that require reaffirmation or reformulation of actions, with a view to improvements in the care offered by the program and for strengthening the PHC.

**EFETIVIDADE DA ATENÇÃO PRIMÁRIA SEGUNDO PROFISSIONAIS DE SAÚDE E O PROGRAMA MAIS MÉDICOS**

**RESUMO**

O estudo teve como objetivo avaliar a efetividade da atenção primária, identificando as distinções entre os modelos de serviços com estratégia de saúde da família em comparação a unidades básicas tradicionais, com e sem profissionais do programa mais médicos. Pesquisa quantitativa, avaliativa, realizada com 128 profissionais - médicos, enfermeiros e coordenadores de unidades de atenção primária, por meio do instrumento Primary Care Assessment Tool (PCATool – Brasil), versão profissionais de saúde, em 2015 e 2016 e adotou análise estatística inferencial. Os resultados indicaram escores acima de 6,6 naquelas unidades que adotam a estratégia de saúde da família e abaixo do ponto de corte nas unidades básicas de saúde tradicionais. Coordenação - sistemas de informações (5,8) e longitudinalidade (6,2) mostraram baixa efetividade dos serviços na unidade tradicional. O acesso obteve baixo escore (4,0), em ambos os modelos. A avaliação da APS nos distintos modelos de atenção revelou que as ações e serviços em saúde oferecidos no município foram mais efetivos quando executados em unidades de ESF, em comparação a UBS tradicional, independentemente da presença de profissionais do programa mais médicos.

**Palavras-chave:** Atenção primária à saúde. Recursos humanos em saúde. Avaliação de serviços de saúde.

**EFETIVIDADE DE LA ATENCIÓN PRIMARIA SEGUN PROFESIONALES DE SALUD Y EL PROGRAMA “MAIS MÉDICOS”**

**RESUMEN**

El estudio tuvo como objetivo evaluar la efectividad de la atención primaria, identificando las distinciones entre los modelos de servicios con estrategia de salud de la familia (ESF) en comparación a unidades básicas tradicionales (UBS) con y sin profesionales del programa “mais médicos”. Investigación cuantitativa, evaluativa, realizada con 128 profesionales - médicos, enfermeros y coordinadores de unidades de atención primaria (APS), por medio del instrumento Primary Care Assessment Tool (PCATool – Brasil), versión profesionales de salud, en 2015 y 2016 y adoptó el análisis estadístico inferencial. Los resultados indicaron puntuaciones arriba de 6,6 en aquellas unidades que adoptan la estrategia de salud de la familia y abajo del punto de corte en las unidades básicas de salud tradicionales. Coordinación - sistemas de informaciones (5,8) y longitudinalidad (6,2) demostraron baja efectividad de los servicios en la unidad tradicional. El acceso obtuvo baja puntuación (4,0) en ambos los modelos. La evaluación de la APS en los distintos modelos de atención reveló que las acciones y los servicios en salud ofrecidos en el municipio fueron más efectivos cuando ejecutados en unidades de ESF, en comparación a UBS tradicional, independientemente de la presencia de profesionales del programa más médicos.

**Palabras clave:** Atención primaria a la salud. Recursos humanos en salud. Evaluación de los servicios de salud.

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