Coordination of primary care: limits and possibilities for integration of care

Coordenação da atenção primária: limites e possibilidades para a integração do cuidado

Coordinación de la atención primaria: límites y posibilidades para la integración del cuidado

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ABSTRACT
Objective: to evaluate the care coordination attribute of primary health care from the perspective of family health team personnel. **Method:** this cross-sectional study was carried out with 349 family health team professionals from program area 3.1, using the Primary Care Assessment Tool questionnaire. The study was approved by the Rio de Janeiro Municipal Health Secretariat research ethics committee. **Results:** the care coordination attribute was favorably assessed (scoring 7.1), above the expected cutoff point of 6.6. Knowledge of user flows in specialized services of the health care network was lacking (scoring 6.2), and the referral and counter-referral system was deficient (scoring 4.6). **Conclusion:** there was a need for communication among health care professionals in order to improve the referral and counter-referral system, and make it possible to integrate care provided to the population.
Descriptors: Primary health care; family health strategy; health evaluation; nursing.

RESUMO
Objetivo: avaliar o atributo coordenação do cuidado na atenção primária à saúde na perspectiva de profissionais de equipes de saúde da família. **Método:** estudo seccional realizado com 349 profissionais de equipes saúde da família da área programática 3.1, por meio da aplicação do questionário *Primary Care Assessment Tool*. Estudo aprovado pelo Comitê de Ética em Pesquisa da Secretaria Municipal de Saúde do Rio de Janeiro. **Resultados:** o atributo coordenação do cuidado teve uma boa avaliação (escore 7,1), estando acima do ponto de corte esperado, 6,6. Observou-se um desconhecimento do fluxo dos usuários nos serviços especializados da rede de atenção à saúde (escore=6,2) e uma deficiência no sistema de referência e contrarreferência (escore=4,6). **Conclusão:** evidenciou-se a necessidade da comunicação entre os profissionais da rede de atenção à saúde, a fim de melhorar o sistema de referência e contrarreferência e possibilitar a integração dos cuidados prestados à população.
Descritores: Atenção primária à saúde; estratégia saúde da família; avaliação em saúde; enfermagem.

RESUMEN
Objetivo: evaluar el atributo de coordinación del cuidado en la atención primaria de salud desde la perspectiva de los profesionales de equipos de salud familiar. **Método:** estudio seccional realizado junto a 349 profesionales de equipos de salud familiar del área del programa 3.1, a través de la aplicación del cuestionario *Primary Care Assessment Tool*. Estudio aprobado por el Comité de Ética en Investigación de la Secretaría Municipal de Salud de Río de Janeiro. **Resultados:** el atributo de coordinación del cuidado obtuvo una buena evaluación (puntaje 7.1), por encima del punto de corte esperado, 6.6. Se observó una falta de conocimiento sobre el flujo de usuarios en los servicios especializados de la red de atención a la salud (puntaje = 6.2) y una deficiencia en el sistema de referencia y contrarreferencia (puntaje = 4.6). **Conclusión:** se puso en evidencia la necesidad de comunicación entre los profesionales de la red de atención a la salud, para mejorar el sistema de referencia y contrarreferencia y permitir la integración de la atención brindada a la población.
Descriptores: Atención primaria a la salud; estrategia de salud de la familia; evaluación en salud; enfermería.

INTRODUCTION

In the care-provision model of primary services, care coordination is an essential attribute, and it presupposes care continuity by the same professional or through referral to other services, aiming at providing users with global care[1].

Studies show deficiencies in the coordination of the care provided by primary services, resulting from interruptions in care-provision flows, the lack of communication among professionals, the poor use of resources and the imbalance between demand and supply[2,3]. Additionally, the fact that people live in situations of great need and vulnerability requires that arrangements for care accountability and management be much more complex and articulated as poor care coordination is an important obstacle to ensuring integrality, access to and provision of quality health care services[4].

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Given the above, this study aimed to evaluate the attribute of care coordination in primary health-care provision from the perspective of professionals on family-health teams.

LITERATURE REVIEW

Primary health care (PHC), in the national and international context, is considered the gateway to health systems. At this level, users are monitored in their health-illness processes or referred to the secondary and/or tertiary levels when needed. Thus, users' access to the primary care network enables integral, resolutive and quality care[5,6].

According to the Primary Care National Policy, primary health care is characterized by a set of health-provision actions, at the individual and collective levels, which includes health promotion and protection, disease prevention, diagnosis, treatment, rehabilitation, damage reduction and health maintenance in order to develop integral care that impacts individuals' health situation and autonomy as well as the health determinants and conditions of communities[5].

In Brazil, the main strategy for implementing primary health care has been the Family Health Strategy (FHS). This strategy has a national scope as an ordering model of health-care networks that aims to transform the traditional biomedical, curative care model into a health model centered on multiprofessional care aimed at promoting the health of families and communities[5,7].

Given this, there is a need for studies aimed at assessing the quality and performance of the services provided through the evaluation of PHC attributes. In these investigations, professionals' views can help the identification of problems[8,9].

The essential attributes include the first contact, continuity or longitudinality of care provision, integrality and coordination. Scientific evidence indicates that health systems organized from the ordering attributes are effective and of quality[9].

The coordination or integration of services involves the ease of access to the other care levels and care follow-up in other specialized services, hierarchically, according to users' health needs[10].

METHODOLOGY

This is a cross-sectional study conducted in Family Health Units located in program area 3.1 of the city of Rio de Janeiro, Brazil, It was extracted from the research investigation entitled *Primary Health Care Services of the city of Rio de Janeiro: an analysis of the dimensions and potentialities of the Family Health Strategy*, developed by the Nursing and Collective Health Research Center (NUPENSC) of Anna Nery School of Nursing, Federal University of Rio de Janeiro.

The study population consisted of 1,284 family-health-team professionals: physicians, nurses, dentists, oral health technicians, nursing assistants/technicians and community health agents (CHA), linked to the units of the selected planning area.

A 95% confidence interval, a 5% sampling error and the percentage of 50% for the homogeneity degree of the sample were considered for sample definition.

As inclusion criteria, professionals who had been providing care on family-health teams with an employment period of more than four months were considered in order to enable greater temporal contact with the population served. Professionals who were on vacation, on a sick leave or on a maternity leave during the data collection period and those who were not found after three visits to the unit by the researchers were excluded. Professionals from health facilities located in regions that the researchers were unable to reach due to lack of security were also excluded.

Three hundred and forty-nine health professionals participated in the study: 86 nurses, 24 physicians, 16 dentists, 30 assistants and technicians, 180 CHA and 13 oral health technicians, selected by convenience during the visits to the units.

Data were collected from January to December 2014 by interviews based on the Primary Care Assessment Tool (PCATool) - Professional version, validated for use in Brazil[11]. From this questionnaire the questions concerning the attribute of coordination - care integration were selected. In addition to these questions, sociodemographic and occupational variables were added to the instrument to enable the participants' characterization.

Data were processed and analyzed using Epi-Info, version 3.5, and the Statistical Package for Social Sciences (SPSS), version 21.

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The calculation of the scores, arranged on a Likert-type scale, was performed according to the steps described in the PCATool instrument manual[11]. The possible answers for each of the items are: "certainly yes" value=4, "probably yes" value=3, "probably not" value=2, "certainly not" value=1 and "I don't know/don't remember" value=9. Thus, the inversion of the score values was initially performed, when indicated. For each component a mean score was calculated based on the quotient between the sum of the value of the items and the number of items.

The scores were converted on a scale from 0 to 10 using the following formula: [score obtained - 1 minimum value] X 10/4 maximum value - 1 minimum value. Values equal to or greater than 6.6 indicated satisfaction bout the particular attribute of primary care[11].

The study complied with the ethical and legal aspects required by Resolution 466/2012, was approved by the Research Ethics Committee of Rio de Janeiro Municipal Secretariat of Health, with registration no. 90/13, and authorized by the Coordination of Program Area 3.1 of the city of Rio de Janeiro.

RESULTS

Regarding the characteristics of the sample studied, it was found that most of the professionals interviewed were under 34 years old and females. Concerning education, there was a predominance of professionals who were high-school graduates, which can be explained by the large number of community health agents and technicians interviewed. Regarding their length of time working in Family Health and at the current health unit, the means were of 3 years and 2.5 years, respectively (Table 1).

TABLE 1: Sociodemographic and occupational characteristics of the professionals interviewed. Rio de Janeiro, RJ, Brazil, 2014.

Professional Category Characteristics	CHA f (%)	Dentist f (%)	Nurse f (%)	Physician f (%)	Nursing Technician f (%)	Oral Health Technician f (%)
Age (years)						
≤34	84 (47.2)	9 (60.0)	52 (60.5)	18 (75.0)	13 (44.8)	5 (38.5)
>34	94 (52.8)	6 (40.0)	34 (39.5)	6 (25.0)	16 (55.2)	8 (61.5)
Gender						
Female	150 (83.3)	14 (87.5)	77 (89.7)	15 (62.5)	26 (86.2)	13 (100)
Male	30 (16.7)	2 (12.5)	9 (10.3)	9 (37.5)	4 (13.8)	0 (0.0)
Education						
Up to High School	165 (91.7)	-	-	-	29 (96.7)	12 (92.3)
Undergraduate Degree	13 (7.2)	2 (12.5)	23 (26.7)	11 (45.8)	1 (3.3)	1 (7.7)
Post-graduation	2 (1.1)	14 (87.5)	63 (73.3)	13 (54.2)	-	-
Length of work in Family Health (in years)						
≤ 3	125 (69.9)	6 (37.5)	38 (44.2)	17 (70.8)	17 (56.7)	3 (23.1)
>3	55 (30.6)	10 (62.5)	48 (55.8)	7 (29.2)	13 (43.3)	9 (69.2)
Length of work at the current Family Health Unit (in years)						
≤ 2.5	68 (39.5)	4 (28.5)	52 (63.4)	18 (85.7)	14 (48.3)	5 (38.5)
>2.5	104 (60.5)	10 (71.5)	30 (36.6)	3 (14.3)	15 (51.7)	8 (61.5)

Regarding the general score for the attribute of coordination - care integration, a score of 7.1 with a standard deviation of 1.66 was calculated. Table 2 shows the distribution of scores according to the questions that evaluate this attribute.

It can be observed that, in general, the attribute of coordination - care integration was well evaluated with a score of 7.1, above the 6.6 cut-off score established by the instrument manual. However, the professionals were not satisfied about the knowledge of the type of consultation that their patients have with specialists and the lack of information from the services to which the patients were referred.

TABLE 2: Distribution of answers referring to the attribute of care coordination - integration. Rio de Janeiro, RJ, Brazil, 2014.

Questions	Mean score
Are you aware of all your patients' consultations with specialists or specialist services?	6.2
When your patients need referral to other services, do you discuss with them about the different services they could be referred to?	7.0
Does anyone from your health care service help the patient make the referred appointment?	8.9
When your patients are referred to another service, do you provide them with written information to be taken to the specialist or specialist service?	8.8
Do you receive useful information about the referred patient from the specialist or specialist service?	4.6
After consultation with the specialist or specialist service, do you talk to your patient about the results of such consultation?	7.3

Among the professionals, the dentists showed greater satisfaction about the actions related to care coordination in primary health care, while the nursing technicians reported dissatisfaction (Table 3).

TABLE 3: Distribution of mean scores according to professional category. Rio de Janeiro, RJ, Brazil, 2014.

Professional category	Mean score	Standard deviation	p
Nurse	7.36	1.33	
Physician	7.43	1.20	
Dentist	8.22	1.74	<0.001
Nursing technician	5.74	2.06	
Oral health technician	8.11	1.90	
Community health agent	7.13	1.61	

DISCUSSION

The results of this study corroborate those of a similar investigation on primary health care that shows the presence of young professionals, who were from 20 to 29 years old, mostly females, and had been working at the family health unit from one to five years[12].

It is a primary-care function to coordinate actions in a shared fashion among the various players on the health-care network, ensuring care continuity. However, such coordination does not always occur efficiently and effectively, and when services do not communicate, user care becomes fragmented[13]. From this perspective, several studies point to the relevance of investigations into the forms of organization and management of primary-health-care network services[5,7,8,12,14].

The results showed a lack of knowledge about the flow of users in specialized services of the health-care network (score=6.2) and a deficiency in the referral and counter-referral system (score=4.6). Other studies aimed at evaluating the coordination of primary care showed that this attribute was well evaluated by professionals; however, the researchers emphasize the negative evaluation in the question regarding the functioning of counter-referral[12,14].

Referral and counter-referral are considered effective methods for tracking user flow in the health system. It is also an efficient linking method. Nevertheless, when such methods do not work, they generate problems that affect the care provided to users, since they are not guided though the health system, which makes it impossible to monitor their health conditions integrally[15,16].

Another implication of not performing counter-referral is the increase in health-care expenses because the work is duplicated[15,17]. In addition, the human resources deficit is another factor that can be detrimental to the articulation among professionals at the three levels of health care and, consequently, interfere with care-provision quality[4,13,18].

Concerning the logic of the articulation of services, it must be perceived even within the same care-provision level, among the various professional categories[19], thus reducing the gap in the integration of care provided to users by all members of the health team. With this regard, by the performance of family-health teams, there is greater capillarity in the health system, which allows better planning, communication and coordination of care at the primary, secondary and tertiary levels of the health care network.[20-22]

Among the limitations of the study, the fact that the results obtained express the specific reality of professionals working in family-health units in one of the ten planning areas of the city of Rio de Janeiro is noteworthy. In addition, the situation of urban violence and work overload made it impossible for data collection to be performed with all identified professionals. The cross-sectional design of this study can also be considered a limitation, since it did not allow certain correlations and causal inferences in the analysis of the scores attributed by professionals to the quality of services provided in the family-health unit.

Thus, there is the need for the development of other more comprehensive studies that would allow the generalization of results and fill the gap in the production of knowledge on the theme of primary health care evaluation in Brazil.

The article points to the need to reflect and establish better and more effective communication between generalist professionals and specialists as a way to guarantee integral care and expand the offer to health services.

In addition, it points out the need to guide users within the health system by means of qualified referral and counter-referral, thus establishing links and care continuity.

Hence, it contributes to professional and academic practices and can be used as a pilot study for further research.

CONCLUSION

It is believed that this study has helped reflection on the quality of the coordination of care provision to the population in primary health care based on the knowledge of the limits and possibilities pointed out by professionals on family-health teams.

Although the mean score of the evaluated attribute is above average, this study shows the need for communication among the professionals working for the health-care network in order to improve the referral and counter-referral system and enable the integration of the care provided to the population.

It is also emphasized that the periodic evaluation of primary-care services is an important tool for the implementation of intersectoral actions and for ensuring the continuity of integral care, equitable access and flow of users in the health-care network.

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