ABSTRACT: This article intended to investigate about the perception of the residents, preceptors and tutors of the Multiprofessional Healthcare Residency about the shared learning in training for teamwork of health professionals. An exploratory research was conducted, with descriptive and analytical nature, cross-sectional type, and a quantitative. The research was conducted of the Health Care Multiprofessional Residency of Baixada Santista campus, considering graduate residents, preceptors and tutors, through a Likert-type attitudinal scale validated by statistical methodology. The scale has presented 95.24% of validated assertions (only one loss) and a reliability coefficient of 93%. As results were presented the data regarding the analysis of the answers to the evaluation instrument, comprising the dimension 1 - Shared Learning in Multiprofessional Residence. Vocational training was also adopted as the axis of analysis, but there were no significant differences between the professions on shared learning in Multiprofessional Residency, with the worst perception of nurses and the best of physiotherapists and nutritionists. The average of the attitudinal scale assertions was 3.20, classified as a comfort zone. However, divergent aspects in the answers among the participants of the research explain the importance of discussing elements that make up the training that contemplates interprofessional education. The respondents’ behavior shows that the Health Care Multiprofessional Residency is a space for shared learning, which develops skills for the health-care professionals to work in teams, starting with the interbranch education. The attitudinal scale statistically validated, product of this research, must also be highlighted, given the importance of evaluating learning and of continuously improving the formation processes in the Multiprofessional Residency, also considering the possibility that this scale might be used in other programs.
**Key Words:** Health Education, Graduate Education, Patient Care Team, Learning, Professional Practice.

**RESUMO:** Este artigo buscou investigar sobre a percepção de residentes, preceptores e tutores da Residência Multiprofissional em Atenção à Saúde (RMAS) sobre as aprendizagens compartilhadas na formação para o trabalho em equipe de profissionais da saúde. Utilizou-se uma metodologia exploratória, descritivo-analítica, tipo corte transversal com abordagem quantitativa. A pesquisa foi realizada junto a residentes egressos, preceptores e tutores do Programa de RMAS, por intermédio de uma escala atitudinal validada estatisticamente. A escala apresentou 95,24% de asserções validadas e um coeficiente de confiabilidade de 93%. Como resultados foram apresentados os dados referentes à análise das respostas ao instrumento de avaliação, compreendendo a dimensão 1 - Aprendizagem Compartilhada na Residência Multiprofissional. Adotou-se também a formação profissional como eixo de análise. No entanto, não houve diferenças significativas entre as profissões sobre a aprendizagem compartilhada na RM, sendo a pior percepção dos enfermeiros e a melhor de fisioterapeutas e nutricionistas. A média das asserções da escala atitudinal foi de 3,20, classificadas em zona de conforto. Entretanto, aspectos divergentes nas respostas entre os participantes da pesquisa explicitam a importância de discutir elementos que compõem a formação que contempla a educação interprofissional. Conclui-se que a RMAS é um espaço de aprendizagens compartilhadas que desenvolve habilidades nos profissionais de saúde, para trabalharem em equipe a partir da educação interprofissional. A escala atitudinal validada estatisticamente também deve ser ressaltada, dada a importância de avaliar a aprendizagem e melhorar continuamente os processos formativos na Residência Multiprofissional, considerando inclusiva a possibilidade de ser utilizada em outros Programas.

**Descritores:** Educação em Saúde, Educação de Pós-Graduação, Equipe de Assistência ao Paciente, Aprendizagem, Prática Profissional.

**RESUMEN:** Este artículo tiene como objetivo investigar la percepción de los residentes, los preceptores y tutores de la Residencia Multidisciplinaria, en la atención sanitaria en el aprendizaje compartido en la formación del trabajo en equipo de profesionales de la salud. Se utilizó una metodología de estudio exploratorio, descriptivo, analítico, transversal, con enfoque cuantitativo. Se realizó la encuesta con graduados residentes, preceptores y tutores del programa MRHC, a través de una escala de actitud validada estadísticamente. La escala demostró 95,24% de los reclamos validados y un coeficiente de confianza del 93%. En los resultados se presentaron los datos sobre el análisis de las respuestas a la herramienta de evaluación que comprenden la escala 1 – residencia multi-aprendizaje compartido. También se señaló la formación profesional como un eje de análisis. Sin embargo, no hubo diferencias significativas entre las profesiones de aprendizaje compartido en RM, con la peor percepción de las enfermeras y los mejores fisioterapeutas y nutricionistas. Las declaraciones de actitud de escala media fue de 3,20, clasificada en la zona de confort. No obstante, los aspectos divergentes en las respuestas entre los participantes de la
investigación explican la importancia de discutir los elementos que componen la formación que incluye la educación interprofesional. El MRHC es un espacio de aprendizaje compartido que se desarrolla en las habilidades profesionales de la salud para trabajar en equipo, de la educación interprofesional.

Palabras clave: educación en salud; educación de posgrado; grupo de atención al paciente; aprendizaje; práctica profesional.

INTRODUCTION

The Multiprofessional Residency is a modality of lato sensu post-graduation for healthcare professionals, except physicians, in the areas of Biomedicine, Biological Sciences, Physical Education, Nursing, Pharmacy, Physiotherapy, Speech Therapy, Veterinary Medicine, Nutrition, Dentistry, Psychology, Social Work and Occupational Therapy.

These Programs are currently present in the 5 regions of the country and integrate different care lines such as Primary Care, Cancer Care, Mental Health, Obstetric Nursing, Medical Physics, Urgency/Trauma, Neonatology, Oral Health: Bucomaxillofacial Surgery and Traumatology, Intensivism, Health Functional and Rehabilitation, Collective Health and Specialized Clinical Care.

The objectives of the Multiprofessional Residency are to integrate teaching-service-community, articulating managers, workers and users from a practice of care that integrates the different knowledge of the professions involved. For this to happen, teamwork and the exercise of a collaborative practice become fundamental.

Batista, reflecting on the theme, says that “interprofessional education (IPE) is currently the main strategy to train professionals capable of teamwork, an essential practice for integrality in health care” (p.25). The shared learning is provided by the IPE as a prominent factor, considering the importance of integrating the professionals in the search for transformative practices in a way that favors the integrality of health care.

The shared learning moments provided by the IPE stimulate and sensitize the residents to the best recognition of their roles in the context of teamwork and the importance and role of the other in providing health care.

In 2010, the World Health Organization (WHO), in its framework for action in interprofessional education and collaborative practice, defends the IPE as a strategy that should start in the first stages of health education for all the professionals.

In the area of nursing, the Committee of the Robert Wood Johnson Foundation, Institute of Medicine of the National Academy of the United States, addresses the Future of Nursing in the
country and in the world (Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing), through a publication of 2011, which highlights as one of the key elements for the growth of nursing, the valorization of teamwork for a shared healthcare practice, essential for the reformulation and improvement of the healthcare system. The mentioned Committee also encourages the implementation of nursing residency programs5.

In moments of shared learning, the IPE should foster the development of competencies common to all professional areas, specific competences of each one of them and collaborative competences, enabling a differentiated practice3.

This practice should be based on coordination and cooperation, stimulated in moments of shared learning through the development of communication skills, critical analysis, apprehension and overcoming of the teamwork challenges4.

This article aims at investigating the perception of residents, preceptors and tutors of the Multiprofessional Residency in Health Care of the Baixada Santista Campus regarding the shared learning in the teamwork training of healthcare professionals.

**METHODOLOGY**

This is an exploratory, descriptive-analytical, cross-sectional, quantitative research, carried out at the Multiprofessional Residency in Health Care (MRHC) of the Baixada Santista Campus. The research participants were the graduates of 2010 (first class to be graduated), 2011 and 2012, as well as the preceptors and tutors of the Program. From the studied population, 62 participated, corresponding to 88.6% of the general population.

The research has been approved by the Ethics and Research Committee of the Universidade Federal de São Paulo for opinion 513.735, dated 01/22/2014. All the participants of the research signed the Term of Free and Informed Consent - TFIC.

In order to achieve the proposed objective, the research subjects answered a Likert type attitude scale with 21 assertions, composed of 3 dimensions: Shared Learning in Multiprofessional Residency, Training for Teamwork, and Development of Competences for Collaborative Practices. This article presents and discusses the respondents’ answers to the assertions of the first dimension.

The process of constructing and validating the scale included the validation of the content and reliability of the instrument, with the accomplishment of some steps: determination of the dimensions that would be investigated; creation of assertions; previous analysis; assembly of the attitudinal scale with assertions and response options; application of the instrument; analysis of the validity of the assertions and reliability of the instrument; calculation and graphical representation.
of the average scores of the assertions and the dimensions of the instrument\textsuperscript{6,7,8}.

The previous content evaluation included some specific yardsticks such as the verification of the clarity of the assertions, the relevance and representativeness of the items\textsuperscript{6}. This instrument also underwent a pre-test.

After this procedure, the scale has been applied to the participants of the research, indicating the tendencies of agreement or disagreement of the respondents regarding the assertions. The responses have been submitted to a content validation process, which included the calculation of the linear correlation coefficient (r) and the reliability of the instrument using the Spearman-Brown formula.

The initially proposed attitudinal scale obtained 95.24\% of validated assertions (only one loss), having from all the proposals for dimension 1 which was statistically validated. According to Ferreira\textsuperscript{6,7} and Moraes et. al.\textsuperscript{8}, it is predicted as acceptable a loss (not validation) of 30\% to 40\% of the assertions analyzed, which in this case could be from 6 to 8 assertions.

The reliability test scored 93\%, showing that the research instrument was well-designed and has statistical density. The validated and randomized scale used in the research can be found in the appendix.

For the analysis of the data, the average of the assertions of the attitudinal scale has been considered, and before each assertion, the respondents had to choose between four options: totally agree, agree, disagree and totally disagree. Full agreement has been scored at 4 points and full disagreement at 1 point, reflecting the respondents’ perception and understanding of the proposed assertions\textsuperscript{6}.

The averages of the answers to the proposed assertions have been disaggregated and classified: between 1 and 1.99 points indicated a negative perception, showing the need for urgent changes; from 2.00 to 2.99 points, difficulties that demanded changes without urgency, and, finally, from 3.00 to 4.00 points, a positive perception, denoting success in what was being researched\textsuperscript{6,7,8}.

\textbf{RESULTS}

The results found are related to the analysis of the answers to the evaluation tool used in the research, including the dimension 1 - Shared Learning in Multiprofessional Residency.

The variable vocational training, divided into 8 occupations, also composed the analysis of this dimension (D-1). The chart below lists the averages by professional category of the research participants:
Chart 1: Average values of the assertions by professional category of D-1 “Shared Learning in the Multiprofessional Residency” from the dissertation “Shared Learning in the Multiprofessional Residency”, Santos, 2015.

Source: Created by the authors.

When we consider this axis of analysis, we perceive that there are no significant differences between the professions on shared learning in the RM, being the worst perception still within the comfort zone related to the nursing course and the best next to the physical therapy and nutrition courses.

Dimension 1 was composed of the assertions numbers 1 to 7, presenting an average of 3.2, as described below:

Faced with assertion 01 “The Multiprofessional Health Residency allows the integration of the actions and knowledge of the different professional categories, in a shared way”, 99% of the respondents agree with the statement.

Assertion 02 “The shared learning in the Multiprofessional Residency allows professionals from different health areas to better understand and recognize their roles and the role of the other in health work”, concentrated 97% of the concordance responses.

Assertion 3, classified in an alert zone (average of 2.90), says that: “The shared learning in the Multiprofessional Residency allows professionals from different health areas to recognize their spaces and limits in the care to be provided in health.”. In this case, respondents were inclined to disagree, revealing that RM spaces may not yet be sufficient for this type of learning.
Faced with assertion 4, “Shared learning in the Multiprofessional Residence places residents in a relationship of interdependence, complementarity and co-responsibility towards care”, 87% of the respondents agree, with a mean very close to the alert zone.

Faced with assertion 05, “The shared learning in the Multiprofessional Residency allows the development of competences for an interdisciplinary action, necessary for integrality in health care”, represented 92% of assertions with respondents who agreed.

Assertions 6 and 7, with 97% and 94% of agreement, respectively, classified in comfort area, indicate that “Shared learning in the Multiprofessional Residency provides a broader and integrated vision of the health-disease process, considering the integration of the knowledge of each professional” and that “Shared learning in the Multiprofessional Residency encourages health professionals to look for solutions to the health problems found in practice.”.

The chart below shows the individual averages of each of the seven assertions validated in D-1:

**Chart 2**: Average values of the assertions belonging to D-1, “Shared Learning in the Multiprofessional Residency” from the dissertation “Shared Learning in the Multiprofessional Residency”, Santos, 2015.

Source: Created by the authors.
This dimension shows that the shared learning in the PMRHC had a positive perception by the respondents given the average of 3.2 for this dimension, with assertions classified in comfort zone, however, there are points of greater and lesser agreement among the respondents that culminate in the need of understanding and deepening of the studied phenomenon, aspects that will be explored in this article.

DISCUSSION

The interprofessional education and collaborative practices that take place within a context of shared learning are topics that have been widely discussed at the global level in publications such as WHO, emphasizing the importance of reformulating the vocational training model⁹.

The data referring to this research, demonstrated how the interprofessional education obtained positive results in the Multiprofessional Residency in Health Care, putting these professionals in contact with each other in order to prepare themselves for the practice of collaborative practices. However, there are certain aspects that require a more critical look, pointing to the need for improvement and changes.

Operating training that does not follow the traditional models often leads to resistance from the professionals, both in academia and in services, creating difficulties, doubts and tensions⁹. According to Peduzzi et al.⁹, it happens not only for the reasons mentioned above, but also because of the need to develop the specificities of each profession, which are important to support the teamwork.

A study carried out in 2011 at the Faculdade de Ciências Médicas of Juiz de Fora (FCMS/JF) evaluated graduates of the graduation courses of medicine, nursing, physiotherapy, pharmacy and dentistry of an Integrator Program, which included students from the first semester in interprofessional practice with the supervision of professors.¹⁰.

The aspects found show that the students evaluated had a high level of agreement (90%) that joint learning to other professional areas made them more apt for teamwork. In the qualitative analysis of this research, there were reports of graduates of medicine and dentistry who do not believe that joint learning is important from the beginning of the graduation, but in the period of training at the end of the course. However, everyone understands teamwork as an effective learning moment¹⁰.

The fact that medical and dentistry courses are more resistant to this aspect, as well as nursing in this research, may be associated with the centrality and hierarchization culturally instituted to these professions¹⁰.
The data found show that the divergence between the professions exist, as well as within the same professional category; however, they demonstrate the agreement that shared learning is present in the Multiprofessional Residency in Health Care.

Thus, the Multiprofessional Residency in Health Care shows, according to the data found, also as a potency in training even considering those that came from graduations in which interprofessional education was not present, because, in assertion 1, the respondents affirm that “MRHC allows the integration of the actions and knowledge of the different professional categories, in a shared way”.

In assertion 02 “The shared learning in the Multiprofessional Residency allows professionals from different health areas to better understand and recognize their role and the roles of the others in health work”, affirms that the understanding of the role of the professional within the team was possible in this context and, according to Pinho, horizontal communication should also be considered in interprofessional work, common objectives in the search for shared commitments, and results monitored and supervised by the team as an integral part of the development of collaborative practices models.

The only assertion that had an average below 3 said: “The shared learning in the Multiprofessional Residency allows professionals from different health areas to recognize their spaces and limits in the care to be provided in health”. Aguilar-da-Silva, et al. differ a little on the results found in this research, since undergraduates had greater agreement (65%) that shared learning facilitates the understanding of their own limitations.

This may be related to the complexity of teamwork, which places professionals with different backgrounds and knowledge to act together, requiring mutual understanding of those involved in the goal to be achieved and requires professionals to create mechanisms of action that include communication, expectations, themes for discussion, objectives, results and forms of evaluation.

Campos and Domitti comment that the recognition of their respective professional area and of each instance involved in the process is important so that the professionals understand their space and limit in the care to be rendered in health. In this way, they emphasize that:

The role of each instance, each professional, should be clear. Someone should be responsible for the longitudinal follow-up and the construction of a logic that seeks to integrate the contribution of the various services, departments and professionals. In general, this role falls to members of the reference team. Certainly, this is not the tradition of functioning health services (pag.402).

These data need to be discussed because, in order for MRHC’s action scenarios to be shared
learning fields, they need to be adapted and prepared for the changes that have been occurring in health practice and training.

Facing the assertion 04, “The shared learning in the Multiprofessional Residency places residents in a relationship of interdependence, complementarity and co-responsibility towards care”, it presented an average, which was very close to the alert zone.

A study carried out in 2010 that evaluated the multiprofessional team in the context of their daily practices evidenced that most of the interviewees made direct mention of the complementarity and interdependence of the different work processes. The reports indicate that a professional area cannot meet or account for all the health needs of the users, since each profession has its own contribution, in addition to mentioning the fact that decisions are taken in a shared way¹³.

These results are similar to those found in this research when it relates the interdependence, complementarity and co-responsibility to care in MRHC. However, a fragmented interdependence is often established, because the care organization itself is not always articulated. Besides that, Cardoso¹³ talks about instrumental complementarity, in which the knowledge of the others is used only as an instrument of their work, which can result in fragmented care.

The assertion that stands out in this article, with the highest average, says that “Shared learning in the Multiprofessional Residency provides a broader and integrated vision of the health-disease process, considering the integration of the knowledge of each professional”, which has now become essential for health practice.

The proposal for the formation of Multiprofessional Residency programs should really be guided by the principles and guidelines of SUS, based on a broader conception of health considering the individual in all the dimensions of life, with professionals who have the sensitivity to understand the human being in its specificities and to walk in a line that guarantees follow-up and provides autonomy to the health user¹.

According to the WHO⁴:

For health professionals to effectively collaborate and improve health outcomes, two or more of them with different professional backgrounds must first have opportunities to learn about others, with others, and among each other. Such cross-industry education is essential for the development of a ‘collaborative, ready-to-practice’ health workforce in which employees work together to deliver comprehensive services in a wide range of health care settings (p.13)
The training for teamwork in RMS, based on IPE, attempts to overcome the fragmentation of care and traditional teaching schemes as an alternative to solve health problems encountered in service9; Given that the last assertion is true, “Shared learning in the Multiprofessional Residency encourages health professionals to search for solutions to the health problems found in practice”.

The interprofessional practice advances towards an extended clinic that, according to Humaniza-SUS, constitutes a tool for articulation and inclusion of the different disciplines and professional categories14.

CONCLUSION

In the context of the Multiprofessional Residency Program in Health Care, it was possible to understand that this was a scenario of shared learning, stimulating professional interdependence and contributing to the construction of interprofessionality through the sharing of learning, however, it seems to have been insufficient for the recognition of the limits and spaces of each profession in the exercise of care.

Shared learning, which occurred on a daily basis in interprofessional relations and actions, has become an important object of the teaching/learning process, favoring the theoretical/practical integration that sometimes becomes disjointed in the graduation of health professionals.

This type of formation, therefore, can provide the construction and reconstruction of a new triggering knowledge of a differentiated health practice that has the sensitivity and integrality to meet the health needs of the population.

We understand that the scale used could also contribute to the study of the residents’ perception of shared learning in MPRHC. The results of this research are innovative because they contribute so that not only the Multiprofessional Residency Programs can be evaluated but any other modality of education that contemplates the Interprofessional Education, giving opportunity for the programs to improve, forming more qualified and prepared professionals for the job market.

The Ministry of Health shows an increasing interest in the subject and international research has already incorporated in its curricula the shared learning as an essential element for the formation of professionals.
REFERENCES


