# Nursing perception and work effectiveness evaluation relating to a novel nursing role in the Italian scenario: The family nurse

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Abstract. The present study aims to understand the Italian nurses' perceptions on this new figure-role, specifically to understand the effectiveness level nurses attribute to this novel professional figure. Furthermore, perceptions are differentiated according to some socio-demographic variables considered in the interviewed nurses, as: gender, age, years of work experience and nursing education level. The questionnaire was administered online and was made up of two sections: the first section referred to some socio-demographic characteristics and the second part included the Work Effectiveness questionnaire, which contained a total of 19 items divided into 6 sub dimensions, as: access to opportunity, to information, to support, to resources, to informal and formal power. The results obtained showed a mild level in perception on work effectiveness in all the six sub dimensions considered, as: access to opportunity, access to information, access to support, access to resources, access to informal and formal power, respectively. By considering all the work effectiveness sub dimensions differentiating by socio-demographic variables, it was highlighted that nurses who reported higher educational level in nursing registered also higher perception in family nursing role in the access to opportunity (p=.001), to information (p=.001), to support (p=.024) and to resources (p=.002), respectively. While no socio-demographic variable was considered determinant in the access to formal power sub dimension and as regards the access to informal power females reported significantly higher levels than males (p=.025), respectively. Nurses referred their clinical positive results to the intensive educational chances to acquire and implement knowledge which were established to improve nursing development for family nurses by being in a role that kept professional development and success.

**Key words:** family; nurse; nursing; perception; work effectiveness

### Introduction

Nowadays, the new epidemiological characteristics of the population, the new frailties and in this period the need to cope with the Covid-19 pandemic, require a caring model oriented towards a territorial offer (1,2), significantly different from that centered on the hospital, which enhances a more focused on the context of the person's daily life (3,4). In particular, the increase frequency in chronic diseases such as neurological, cardiovascular and tumor diseases, has led to a progressive need to assist the patient after

discharge from the hospital and to an extension of the need for assistance (5). Comorbidity can lead to a decrease in the ability to engage in daily activities, a greater dependence on others for basic vital functions and a greater difficulty in accessing local services, elements that effectively introduce the description of the so-called "fragile subject" which often reaches this condition because it does not have the possibility of accessing a series of territorial services, despite being functionally competent (6). The territorial health assistance becomes the place of choice for the activities of prevention and health promotion, pathways to take

charge of the chronic patient and personalization of assistance, in close correlation to the National Chronicity Plan (7) and the National Prevention Plan (8). Particularly attention is paid to prevention, physical activity, nutrition, stress reduction, which are all peculiarities of what we can define as "new generation of patients" (9). Therefore, the needs of citizens in terms of care and treatments have changed over time, generating what are defined as new health needs. The expression "new health needs" refers to new needs expressed by individuals, who require medical care and health care increasingly tailored to them (10). At the same time, the aim is to contain health costs, mitigate the impact of the disease on the quality of life, empower the patient on lifestyles, actively involving him in the management of his own health condition (self-care) (11). The health system is called to anticipate the needs of patients and to follow them on an ongoing basis according to a health care initiative integrated with social services (12). If it is true that investments in public health have been decreasing for several years now, and that spending on private health has instead been increasing, it should not be difficult to make a rather trivial deduction: putting the patient at the center of a virtuous process, the so-called "citizen empowerment" could be pursued, through which an individual is made aware who, by now aware, will be able to follow a healthier lifestyle (13). To obtain these results, a territorial network model should be envisaged, based on multidisciplinary skills in which all the healthcare workers involved have their own responsibilities and autonomies, also according to the peculiar characteristics of each profession, in order to allow health education, prevention, assistance and satisfaction of care needs, individual condition's control, in order to avoid disease processes, aggravation and / or complications by also respecting fragility conditions, too (14). Faced with an ever-greater fragmentation of knowledge, to ensure a comprehensive, unitary and sustainable response, primary care might be distributed within a broader and more professional system as disclosed in the Declaration of Astana (15). The latter reaffirms the historic 1978 Alma-Ata Declaration, in which for the first time world leaders were committed to primary health care and to putting health equity on the international agenda (16). According to the declaration of Alma Ata, primary health care should be the center and fulcrum of national health systems, representing the first opportunity for contact with individuals, the family and the community with the National Health Service, bringing health care as close as possible to the places of life and work (17). In this way primary health care would constitute the first element of a continuous health care process directly dependent on health professionals, adequately prepared, from a social and technical point of view, to work as a health team and to respond to health needs expressing by the community (18). It was concerted the idea that the clinical area and the assistance one, the first for the doctor and the other for the nurse, might also be integrated in the territory setting. The Italian National Federation of the Orders of Nursing Professions (FNOPI) has assessed that in order to address the need for health in the area of people with chronic and non-self-sufficient diseases, in addition to general practitioners for what concerns diagnosis and therapy, they are used for the continuous assistance these subjects need at least 31,000 nurses as considering 1 for every 500 citizen with these characteristics, which in Italy are 16 million (19). Therefore, the family nurse is the possible answer to this multidisciplinary role, stimulating a growth of the profession oriented towards confrontation with the patient and to establish alliances with other professionals whose main purpose is to make accessible to all those who have need assistance in nursing provision (20). Analyzing the evolution of the figure of the Family Nurse from a historical point of view, in 1974 the World Health Organization published the Community Health Nursing report, in which the concept of community assistance was developed (21). The report also describes the family as the oldest and most solid social institution, whose members share genetic traits and lifestyles that affect health. For this reason, the illness of one of the members of the family unit also affects the health of all the other members at an economic, social and psychological level. Family Health Nursing is based on the nurse's ability to direct and encourage the family, identifying their health needs and indicating the best way to use health services (22). The document also reiterates the need for a change in the training of nurses above all, producing professionals with basic and advanced knowledge from a scientific

point of view, with skills in clinical diagnosis and preventive, curative and rehabilitative skills. The family nurse become the expert who know how to apply nursing skills in family and community contexts using medical knowledge to ensure the best possible quality of care for both individuals and families (23). In 1988, the Vienna Declaration on Nursing encouraged the development of pathways based not only on the treatment of the disease, but also on the development of health (24). The document also introduces the figure of the nurse, a professional suitably trained in the aspects of primary care and therefore, able to practice both in the hospital and in the community. In 1993 the "Nursing in Action" project was born, developed with the aim of strengthening nursing so that it could support the European health policy for all (25). Subsequently in 1998 the World Health Organization (26), with the publication of Health for all in the 21st century, defines the figure of a new nurse: the Family Nurse. Based on the skills derived from the WHO definition of the multifaceted role of the Family Nurse, a curriculum has been drawn up that will prepare qualified and experienced nurses for this new role (27). The curriculum emphasizes the integration between theory and practice. The purpose of the publication is to achieve the full potential of health for all as a universal right in relation to the increase in the quality of life of both individuals and communities in continuous global economic development (28).

In Italy, during the current year, the position statement of the family and community nurse is promulgated, defining the Family and Community Nurse as "the professional responsible for nursing processes in the family and community, possessing specialist knowledge and skills in primary care and public health nursing area. It acts the skills in the provision of complex nursing care, in health promotion, prevention and participatory management of individual, family and community health processes, operating within the Primary Health Care system (29). The Family and Community Nurse has health as its objective and works by responding to the health needs of the adult and pediatric population of a specific territorial and community area of reference and promoting the health and social integration of services. It acts in professional autonomy, referring to the nursing services of the reference District, in close contact with the health and social services and with other professionals of the National Health Service (30). The family and community nurse can operate in very different primary care models due to the different characteristics of the territorial context" (31). Therefore, starting from these basically assumptions that introduce the figure of the family nurse on the Italian care setting, the present study aims to understand the Italian nurses' perceptions on this new figure-role, specifically to understand the effectiveness level nurses attribute to this novel professional figure. Furthermore, perceptions are differentiated according to some socio-demographic variables considered in the interviewed nurses, as: gender, age, years of work experience and nursing education level.

# Materials and methods

The questionnaire

The questionnaire was administered online through the Google Moduli function from August 2021 to September 2021. Nurses were recruited through some pages and nursing groups presenting on the following Facebook and Instagram pages.

The questionnaire was made up of two sections: the first section referred to some socio-demographic characteristics, specifically:

- Gender, if the respondent was female or male;
- Age, classified into four classes, as: from 20 to 30 years, from 31 to 40 years, from 41 to 50 years and finally over 51 years;
- Years of work experience, classified until 5 years and over 6 years;
- Nursing educational level, according to the Italian nursing statement and regulation in the nursing profession, specifically: diploma, first level degree, first level master, master degree, second level degree or doctoral studies.

In the second part of the questionnaire the Work Effectiveness questionnaire was administered, which contained a total of 19 items divided into 6 sub dimensions, which identified the perception on the Italian nurses as regards the family nursing role and its concern. The six sub dimensions included the access to:

- opportunity, regarding the possibility for growth and movement within the organization as well as the opportunity to increase knowledge and skills;
- information, referring to have the formal and informal knowledge that is necessary to be effective in the workplace, as: technical knowledge and expertise required to accomplish the job and an understanding of organizational policies and decisions;
- support, receiving feedback and guidance from subordinates, peers, and superiors;
- resources, considering to one's ability to acquire the financial means, materials, time, and supplies necessary to do the work;
- informal power, deriving from social connections and the development of communication and information channels with sponsors, peers, subordinates, and cross-functional groups;
- formal power, deriving from specific job characteristics such as: flexibility, adaptability, creativity associated with discretionary decision-making, visibility, and centrality to organizational purpose and goals.

For each subscale mean score is obtained by summing and averaging the items. Score range is between 1 and 5. Total score for each sub dimension ranged between 6 and 30. Higher scores represent stronger perceptions of working in an empowered work environment. Scores ranging from 6 to 13 are described as low levels of empowerment, 14 to 22 as moderate levels of empowerment, and 23 to 30 as high levels of empowerment (32).

# Statistical analysis

All data were collected in an Excel data sheet and then, statistical analyses were performed thanks to the IBM SPSS, version 20, software. All socio-demographic characteristics were considered as categorical variables and then, presented as frequencies and percentages. Answerers relating to the work effectiveness

questionnaire sub dimensions were presented as means  $(\mu)~\pm~standard~deviations~(s.d.).$  Then, univariate analysis was performed according to each sociodemographic characteristic to assess differences among interviewers as concern the family nurse role. All tests with p<0.05 were considered significant.

### Ethical considerations

In the first part of the questionnaire, it was clearly explained the aim of this research study, and then the consent for participation. Therefore, all subjects who did not give their consents were not included in the present study. Additionally, no data collected will be provided and the anonymity of the processed data was ensured.

The present study was approved by the Ethical Committee of Polyclinic in Bari, Italy, with no. 6930/2021 and ensured all ethical concerns included in the Declaration of Helsinki.

### Results

A total of 151 Italian nurses agreed to participate in this study. Gender differences were equilibrated between them, as 477% were females and 52.3% were males. Most of participants aged between 31-40 years (31.1%) and 41-50 years (29.8%), respectively. 72.8% of nurses worked up 5 years and most of them had a nursing educational level from 3 years (46.4%) to 3-5 years (45%), respectively.

Data related to the work effectiveness questionnaire were all nearly the lower and medium level in work environment empowerment by considering the referring values abovementioned (Table 1).

By considering univariate analysis according to the access to opportunity sub-dimension, significant differences were reported according to different classes of age, as older nurses reported significantly higher levels in work effectiveness values than others (p=.015). moreover, nurses with higher educational nursing level reported significantly higher scores than the other groups, as considering the access to opportunity (p=.001) (Table 2).

As regards the access to information only by considering the educational level it was reported

significant differences, as nurses who registered more years in nursing education recorded higher levels in the access to information sub dimension (p=.001) (Table 3).

**Table 1.** Sampling characteristics (n=151).

Socio-demographic characteristics	n;%
Gender	
Female	72(47.7%)
Male	79(52.3%)
Age	
20-30 years	32(21.2%)
31-40 years	47(31.1%)
41-50 years	45(29.8%)
>51 years	27(17.9%)
Years of work experience	
Until 5 years	41(27.2%)
≥6 years	110(72.8%)
Educational level	
Until 3 years	70(46.4%)
3-5 years	68(45%)
>5 years	13(8.6%)
Work Effectiveness sub-dimensions' scores	μ ± s.d.
Access to Opportunity	12.20±1.97
Access to Information	11.22±2.01
Access to Support	11.37±1.88
Access to Resources	12.07±2.09
Access to Informal Power	16.12±2.55
Access to Formal Power	11.91±2.00

The same trend was registered in the access to support sub dimension, as nurses with higher nursing educational level reported significantly higher levels in this sub dimension, too (p=.024) (Table 4).

Moreover, a significant difference was reported by considering the educational level (p=.002): nurses with higher educational level also reported greater values in access to resources, respectively (Table 5).

By considering the informal power access sub dimension, significant differences were reported by considering gender variable, as females reported higher levels than males (p=.025) (Table 6).

Finally, no significant differences were reported according to all socio-demographic characteristics considered, as reporting in the Table 7.

## Discussion

The present study aimed to understand the Italian nurses' perceptions on this new figure-role, specifically to understand the effectiveness level nurses attribute to this novel professional figure. Furthermore, perceptions were differentiated according to some sociodemographic variables considered in the interviewed nurses, as: gender, age, years of work experience and nursing education level. The results obtained showed a

Table 2. Differences in perceptions on family nurse role in "access to opportunity" sub dimension, according to socio-demographic characteristics (n=151).

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	12.07±1.97	.534	.466
Male	12.30±1.96		
Age			
20-30 years	12.50±2.38	3.583	.015*
31-40 years	11.60±1.89		
41-50 years	12.09±1.63		
>51 years	13.04±1.76		
Years of work experience			
Until 5 years	12.24±2.34	.039	.844
>6 years	12.17±1.82		
Educational level			
Until 3 years	12.01±2.02	7.722	.001*
3-5 years	12.00±1.84		
>5 years	14.15±1.21		

<sup>\*</sup>p<.05 is statistically significant.

<b>Table 3.</b> Differences in perceptions on family nurse role in	"access to information" sub dimension, according to socio-demographic
characteristics (n=151).	

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	11.14±2.02	1.173	.281
Male	11.49±2.01		
Age			
20-30 years	10.94±1.83	1.125	.341
31-40 years	11.25±2.47		
41-50 years	11.33±1.75		
>51 years	11.89±1.70		
Years of work experience			
Until 5 years	10.85±1.88	3.127	.079
>6 years	11.50±2.04		
Educational level			
Until 3 years	10.74±1.97	7.800	.001*
3-5 years	11.65±2.00		
>5 years	12.77±1.09		

<sup>\*</sup>p<.05 is statistically significant.

**Table 4.** Differences in perceptions on family nurse role in "access to support" sub dimension, according to socio-demographic characteristics (n=151).

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	11.08±2.01	3.274	.072
Male	11.63±1.72		
Age			
20-30 years	11.19±2.01	.772	.511
31-40 years	11.23±1.86		
41-50 years	11.36±1.72		
>51 years	11.85±2.03		
Years of work experience			
Until 5 years	11.34±1.92	.014	.907
>6 years	11.38±1.87		
Educational level			
Until 3 years	11.04±1.97	3.846	.024*
3-5 years	11.48±1.77		
>5 years	12.54±1.39		

<sup>\*</sup>p<.05 is statistically significant.

mild level in perception on work effectiveness in all the six sub dimensions considered, as: access to opportunity, access to information, access to support, access to resources, access to informal and formal power, respectively. In this regards literature showed that some anticipated concerns, regarding ageing populations, arise frequency in chronic diseases, improved attention on

healthy lifestyle and prevention, and address healthcare systems from hospitals to communities, by emphasizing health organizations worldwide to implement new approaches in primary care delivery, especially in nursing profession (33,34). As many activities do not compulsory need the knowledge and competences of a doctor, employing nurses to spread the efficiency of

**Table 5.** Differences in perceptions on family nurse role in "access to resource" sub dimension, according to socio-demographic characteristics (n=151).

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	12.06±2.24	.004	.953
Male	12.07±1.96		
Age			
20-30 years	12.00±2.75	.791	.501
31-40 years	11.72±1.92		
41-50 years	12.36±1.71		
>51 years	12.26±2.10		
Years of work experience			
Until 5 years	12.07±2.39	.001	.980
>6 years	12.06±1.98		
Educational level			
Until 3 years	11.83±2.17	6.574	.002*
3-5 years	11.94±2.02		
>5 years	14.00±.71		

<sup>\*</sup>p<.05 is statistically significant.

**Table 6.** Differences in perceptions on family nurse role in "access to informal power" sub dimension, according to socio-demographic characteristics (n=151).

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	15.64±2.78	5.151	.025*
Male	15.60±2.24		
Age			
20-30 years	16.41±3.36	.391	.760
31-40 years	15.91±2.34		
41-50 years	15.98±2.27		
>51 years	16.41±2.32		
Years of work experience			
Until 5 years	16.32±3.08	.315	.576
>6 years	16.05±2.33		
Educational level			
Until 3 years	15.91±2.70	2.530	.083
3-5 years	16.06±2.42		
>5 years	17.61±1.98		

<sup>\*</sup>p<.05 is statistically significant.

the primary care task is an important healthcare organizational issue (35,36). In order to better improve efficiency and quality in primary care access, changes involving both nurses and doctors may represent a winner approach (35-37). However, changes in primary care practice organizations are a very radical

passage and might have different implications both regarding national legislation and local practices (33,38-39). However, in many countries, current reforms indicate a switch in the boundaries between medicine and nursing (36) by including in the nursing profile added competences in primary care (33,35,36,40). In

Socio-demographic characteristics	μ ± s.d.	F	p-value
Gender			
Female	11.90±2.01	.001	.979
Male	11.91±1.99		
Age			
20-30 years	12.12±1.93	.932	.427
31-40 years	12.19±2.01		
41-50 years	11.64±1.85		
>51 years	11.59±2.20		
Years of work experience			
Until 5 years	11.90±2.00	.000	.986
>6 years	11.91±2.00		
Educational level			
Until 3 years	11.76±2.04	.715	.491
3-5 years	12.12±1.97		
>5 years	11.62±1.89		

**Table 7.** Differences in perceptions on family nurse role in "access to formal power" sub dimension, according to socio-demographic characteristics (n=151).

this way, family nurses could be considered as an important source of human capital to improve efficiency and quality in primary care delivered (37,41-44).

Although the World Health Organization (WHO) have produced several recommendations concerning approaches to expand the role of nurses (45) by also suggesting to document decisions on healthcare delivery models with accurate evidence on the quality of care, as well as on access and costs, by comparing care provided by nurses and by doctors.

From 2005 numerous evidence have published precise suggestions on the effectiveness of nurse-doctor replacement [39] both by highlighting interest in task switching between medicine and nursing and also implementing local legislation and educational reforms, too. Specifically, position of the family nurse was the nurse-doctor interchange in primary care for supplying of first and urgent contact care and follow-up of patients suffered from chronic conditions. Nurse-doctor replacement for preventative facilities and health training in primary care has been less adeptly investigated (46). Particularly, the nurse acquired accountability for first contact (47-51) and in progress care for all existing patients (52-61).

By considering all the work effectiveness sub dimensions differentiating by socio-demographic variables, it was highlighted that nurses who reported higher educational level in nursing registered also higher perception in family nursing role in the access to opportunity (p=.001), to information (p=.001), to support (p=.024) and to resources (p=.002), respectively. While no socio-demographic variable was considered determinant in the access to formal power sub dimension and as regards the access to informal power females reported significantly higher levels than males (p=.025), respectively. In the current literature there are not similar studies in purpose and methodology than the present. So, differences in work effectiveness perceptions in family nursing role according to socio-demographic characteristics are not found. Although there were numerous evidence concerning human facilities in shifting and turnover both in critical and chronic care health contexts, very few literatures was highlighted about these themes within community-based public health departments (62-64). Public health nurses are often baccalaureate degree trained (65-67) and necessitate a high level of nursing competencies and knowledge in promoting, protecting, and maintaining wellbeing for persons, families, communities, and populations (66,67). The study conducted by Yeager and Wisniewski (63) concluded that in the United States (USA) family nurses were more

<sup>\*</sup>p<.05 is statistically significant.

motivated and then, abler to be innovative in a flexible work environment. However, few evidence deeply investigated on organizational, team, and individual factors that could impact the ability of the family nurse program to engage, maintain and shorten the movement of public health nurses engaged within this objective nursing intervention.

### Conclusion

Both the present data and the current literature in this topic highlighted that nursing growth, including the accomplishment of nurse family core curriculum and also the accessibility of current educational possibilities, could improve professional nursing knowledge and competencies. Nurses referred their clinical positive results to the intensive educational chances to acquire and implement knowledge which were established to improve nursing development for family nurses by being in a role that kept professional development and success.

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