# The Role of Communication in Stereotypes, Prejudices and Professional Identity: The Case of Nurses



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Abstract Nursing, conceived as a daily professional service aimed at "taking care of", "satisfying the needs", "the well-being of the assisted person", has a very recent history compared to other disciplines in the field of medicine and further professional fields. Nurses have found their affirmation for a long time as well as an obvious prestige and social recognition. Over recent decades, despite the deep evolution of the nurses' figure, the public opinion is still anchored to an image of them, heavily influenced by stereotypes and prejudices fuelled above all by mass media (and new media). Indeed, media contribute to provide a professional portrait that mostly corresponds to the old role, duties and composition of this professional category, with limited skills, working in the shadow of physicians to whom only clinical knowledge belongs. The aim of this paper is to define the portrait of this professional figure and how it is altered by means of communication and, thus, transmitted to public opinion. Adopting a qualitative methodology, using text analysis technique, we investigate and represent through images 50 articles published on web (blog, social media, specialized nursing websites) in the period 2008–2016, evidencing the main role and functions attributed to nurses still deeply affected by stereotypes and prejudices and the related professional identity.

## 1 Introduction

In contemporary society the care and support of sick people is deeply institutionalized and entrusted to skills and technical abilities of various professional figures, such as, physicians, nurses, psychologists and so forth. In this wide professional

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health care category, nurses represent the health professional working in the field of: prevention (informing, educating and supporting the citizen, the family and the community about the correct lifestyles and respect for the life), care (with diagnosis, treatment and rehabilitation), assistance (identifying and managing the needs of patients and family) and rehabilitation (promoting and supporting the recovery and maintenance of the greatest possible autonomy, particularly in chronic diseases, and educating the individual and his/her relatives with reference to self-care and appropriate lifestyles) [1]. The crucial area of the nursing profession concerns assistance, conceived as the ability to respond, on scientific basis, to the needs of people with health problems; it is the activity that all nurses share, whatever their field of work.

However, today the role and activity of nurses are perceived inadequately: there are distorted and stereotyped images spread by the media, traditional and new media, which threaten nursing autonomy and professionalism. In fact, there exist still stereotypes and prejudices linked to nurses who do not receive the right merit and social recognition for their profession, although they play a key role in the optimal functioning of the healthcare system.

Generally, the determinants of stereotypes and prejudices can be traced in most cases to ignorance, the lack of knowledge, and the strong communicative barriers among those people oriented to create negative meanings of diversity [2]. These factors affect the thinking of individuals regardless of their will and awareness, especially, when they are deeply rooted in the concerned cultural, organizational and social patterns.

Although during the last years the profession of nurses has undergone a significant ever-growing evolution, the main traditional media, cinema and television, have spread an image of nurses often approximate and far from the reality. Indeed, the big and small screen over the years have represented a stereotyped figure, that is the result of the collective imagination and unconnected from any real foundation. Stereotypes and prejudices are aspects that can hinder relationships between nurses and patients and convince them to believe that they are not receiving proper care [3]. These media often distort the concept of nursing and put society in the condition of not recognizing the very important mission of nurses; they have an immutable validity which also resists when nurses present positive features that respond to people's expectations [4]. In this regard, the wider knowledge of others and the ability to critically review their convictions are two fundamental elements to overcome distrust and prejudices.

Some research suggests that media play an important role in the spread of stereotypes and prejudices related to the nursing profession (such as stereotypes and prejudices recognize the lack of responsibilities for nurses because of doctors) and to favor an image of the category that does not faithfully correspond to current reality [5]. Therefore, professionals and trade associations should require greater respect from the mass media for more accurate and truthful information to citizens.

According to prevalent studies, the influence of mass media on public opinion is mediated by reference groups and the cultural substrate of subjects. About this, Katz and Lazarsfeld, in their critical review, emphasize that "an attempt to change

an opinion or individual attitude can not be successful if the subject shares his opinion with others" and add that "it is all the more likely that an attempt to change an individual's opinion or attitude is as effective as it is the opinion or attitude shared by others" [6: p. 52]. Thus, it is evident that the group is essentially an anchor point in which individuals act, change or reinforce their opinion. Mass media reinforce a stereotyped and old image of the nursing profession in the culture and the feeling of the majority of people exposed to the message. Mass media are significantly able to influence culture and collective thinking and, therefore, news and stories reported by newspapers and television programs can affect and enhance the image that people have about nurses, their professionalism and the structures in which they operate [7].

The study of the image and nursing identity presented by media allows to describe and understand the way this profession is perceived by the population, and, hence, how it is possible nurses see themselves [8]. The professional identity desired by nurses, unfortunately, is something only theoretically existing. The reason for this uncertainty of nurses role is also related to the changes occurred in their training and specialization process; there was not enough time to promote and make the cultural and professional revolution [9] in the collective imagination, thus, promoting a disagreement in the social vision of this figure: One profession does not live unless if it is not socially visible [10].

In the international literature the belief, that the nurses' image is significantly influenced by the culture of belonging to individuals, varies according to the socio-cultural context and the prevailing health policies [11]. Therefore, individuals have an inadequate perception of the role and activity of nurses, because of existing limited thoughts difficult to decay, despite the constant growth of this profession.

When citizens report their disappointment to healthcare organizations, they often claim the little expertise of hospitals, referring primarily to nurses. Most individuals consider nurses to be mere perpetrators of medical decisions and just like operators able to practically provide services ignoring their knowledge of medicine and the fact that they actively participate into the process of care, medical innovation, diagnosis and treatment [1]. It is clear that the term professionalism is not voluntarily associated to nursing, which is still seen as a vocation to which people must devote themselves to satisfy the primary needs of patients, such as hygiene and nutrition, forgetting everything concerning the care plan.

In this complex and infinite struggle between what nurses are and are not, it is crucial that the real image about nurses can be spread from ensuring that nursing professionalism can be recognized overcoming any stereotypes and prejudices often linked to cultural traditions or origins of the profession [12].

This paper aims to identify the stereotypes most commonly associated with the figure of nurses and to what extent the current media, which play an incisive role in the image of professions. In particular, we want to see if new media have contributed and still do so to nurses' image usually far from the reality. Internet images have become more and more important in recent years due to the growing use of this form of media by the public (particularly young adults and teens) to obtain information and learn about the world. The choice to analyze this professional

category is related to the fact that its image affects on: recruitment into the profession; the decisions of policy makers who enact legislation that defines the scope and financing of nursing services; the use of nursing services by consumers; and the self-image of the nurse. We firstly conducted a review of the literature on the issues investigated, that is social categorization, stereotypes and prejudices related to nursing, as well as the ability of the media, especially the Internet, to influence the perception of social reality. Also, we evidence what the image is about nurses, often approximate and far from reality, which derives by the traditional mass media, that is cinema and television. Then, we conducted a qualitative study through text analysis technique, where we illustrate the image of nurses thanks to a statistical analysis of nursing image data based on nursing articles collected on various internet sites. Indeed, 50 articles in italian language published on web (blog, social media, specialized nursing websites) in the period 2008–2016, have been analyzed with the purpose tooutline the main role and functions attributed to nurses still deeply affected by stereotypes and prejudices and the related professional identity.

#### **2** Social Categorization, Stereotypes and Prejudices

Most social systems are characterized by the sense of belonging to a set of collective values, which contribute to the specific identity of those who are involved. The fundamental characteristic of human subjectivity is its social nature, so it builds its identity by using society as a mirror. According to this theory, each action of people depends on their interactions with other individuals and environments. A key point for understanding this phenomenon and the dynamics between social groups is the theme of *social categorization* [13]. Social categorization represents the cognitive process that divides the social world into categories to which it belongs or does not belong, which accentuates the perception of similarities and differences between the different categories and produces differentiations on the assessment and at behavioral level.

Social categorization is an useful mechanism that allows us to control our social environment and to have proper behavior within the society. However, it has also negative effects: social categorization, in fact, makes members of one group more similar to each other than they are and it exaggerates the differences between groups [14]. More specifically, categorization favors categorical differentiation, that is, the process by which the differences between the elements belonging to different groups are maximized and the differences between the elements belonging to the same group are minimized. This process helps to discriminate class members from those who are not part of the same class. To judge the value of one's own group, then, individuals are compared to other groups and the outcome of that assessment directly affects their self-esteem. For this reason, it tends to alter the comparison in an attempt to create a positive outlook for one's own group or to positively differentiate one's own group from others. This phenomenon was explained by Tajfel through the notion of social identity: "*an individual's social identity is linked to the* 

knowledge of his belonging to certain social groups and to the emotional and appreciative meaning that comes from that belonging" [15: 31]. Given that one of the fundamental needs for individuals is to obtain a positive self-assessment, and since membership of a group is part of our identity, then favoritism towards members of our own group can be considered in relation to strive to distinguish their group in positive terms compared to others [16].

As a consequence of categorization, individuals implement a process that in social psychology is called explanation or inference. In other words, they attribute the causes of a person's behavior to the fact that this is part of a specific category [16]. In addition, another effect of social categorization is that it, along with social identity, is strongly involved in the formation of stereotypes and prejudices. In particular, studies on group relationships have largely focused on the relationship between categorization, stereotype and prejudice.

In summary, social categorization is the basis for the stereotypes that individuals and groups tend to develop [17]. The term stereotype is used to indicate "a preconception, an image of reality that is created in the mind and that determines the perception of people and events, creating a coherent and fairly rigid set of negative beliefs that some group shares with respect to Another group or social category" [18: 5–9]. The stereotype is based on preconceived beliefs and opinions that are not verified, arise from sedentary habits and expectations systems, rely on entirely relative points of view that are considered absolute. The concept of stereotype was introduced in the social sciences by a journalist, Walter Lippman, interested in interpreting the mechanisms of formation of public opinion; in his view, "the relationship that social actors have with external reality is mediated through the mental images that they form, especially through the media" [18: 5–9]. The functions performed by stereotypes are manifold, as besides facilitating social assessments, they also have a psychological relevance as they provide a coherent worldview and event that can make us feel the right one. The stereotype also has the function of identifying the social object on which to discharge the responsibility of situations of collective discomfort caused by natural calamities, famines, or diseases of some members of the group [19].

From a sociocultural point of view, stereotypes reinforce the homogeneity of a group. In order to understand how stereotypes are formed, we can also consider the concept of social representation as a form of knowledge typical of modern societies that overlaps or equates to the myths of traditional societies [19], consisting of a set of values, ideas and practices that fulfill the dual function of guidance and control of the world and foster communication among members of a community as it provides a code of exchange and classification for the social, individual and group world. Social actors tend to convey the dominant collective representations in a conforming way, often welcoming stereotypical forms, aligning them with attitudes, motivations, and behavior. Social representations, therefore, rather than forms of knowledge of social systems that are elaborated by individuals transforming into individual social representations, tend to become stereotypical mental forms and as such to be assimilated [17].

The psychological explanations of stereotype development argue that social actors tend to establish illusory correlations between group membership and undesirable behaviors, tending to recall anti-social behaviors committed by members of minorities rather than acts similar items made by members of the majority. As to the stereotype mechanisms of action, numerous studies have shown how these influence social assessments even when they have specific knowledge about the person being evaluated, both in experimental groups and in the field, in a context of staff selection. Also the explanations that social actors give to social events are often stereotyped. It has been verified that when other people's behaviors are to be judged, group stereotypes play an important role: those belonging to a group are prepared to develop a final assignment error, so negative behaviors by members of external groups are attributed to causes within the group, while the same behaviors as members of the inner group are justified by attributing them to an external cause [20].

Social categorization is closely and significantly related both to prejudices and stereotypes. Social categorization is also closely related to the formation of prejudices that we can define as "that complex of attitudes, negative or positive, arising from a preliminary assessment, not supported by direct experience or based on incorrect and limited information and on preconceived expectations, which are unduly generalized" [21: 22–32]. The prejudice is based on a categorization process, which has the function of guiding attitudes and behaviors, but which, inevitably, also causes, very often, partial and partial evaluations and judgments. The categorization process lets you think using class systems, or categories that help you quickly understand a message or choose how to act, because through typing, we are able to classify a single event across the family schema [21]. This process, therefore, allows a quick choice of attitudes to be adopted, allowing to identify the problem to be addressed in a short time, facilitating the choice of behavior to be taken.

Allport distinguishes five different forms of prejudice: "*defamation, avoiding contact, discrimination or exclusion, physical violence, the extreme form of extermination*" [21: 22–32]; these forms, although not representing a precise gradation, are a progression from a low to a very high degree of prejudice.

Prejudice is not just an individual attitude but constitutes, first and foremost, a collective attitude that varies over time and, thus, it is very difficult, as well as inappropriate, to explain it by reference to a single interpretative theory, as well as to a single paradigm specification. Therefore, the social psychology provides many theoretical and empirical contributions for studying prejudices. These theories agree that prejudice is more likely to manifest itself in relation to those who have a personality prevented in the presence of conditions such as: "heterogeneous social structure; tolerance of vertical mobility; rapidity of social transformation; ignorance and communication barriers; progressive increase of a minority group; direct competition and real danger; important interests sustained by exploitation within a community; fanaticism favored by the rules governing aggression; traditional justifications of ethnocentrism; obstacles to assimilation and cultural pluralism" [22: 55], although none of these socio-cultural laws of prejudice is sufficient explanation [23].

In summary, most frequent consequences of prejudices are those that create expectations about individuals or groups that influence the behavioral interpretation and regulate social interaction, but sometimes also they can alter perception, triggering reactions that confirm the stereotypes.

# 3 Media Power and Social Perception: The Influence of the Internet

The public opinion is also formed by the media as they contribute significantly to composing social representations and the collective imagination. Media stereotypes, commonplace stereotypes and prejudices are manipulated and presented to the public in order to inform, entertain and advertise a product, but also with the clear function of guiding values, lifestyles, stereotypes and prejudices. In the past, broadcasts and entertainment newspapers often had greater penetration capacity in the wider social fabric to be more effective as vehicles than in democratic societies as a kind of camouflage propaganda [24]. Today, however, traditional media are experiencing a deep crisis caused by the exponential growth of new media, but they are still the ones who have a significant influence on public opinion. In particular, Safko defines *new media* as "all those information tools that went along with existing media such as newspapers, periodicals, press agencies, and news broadcasters. Their element of novelty consists in particular in the fact that these new subjects are tied to double-wire with the internet universe" [24: 64].

In recent years, digital technology has led to the development of social networks (e.g., Facebook, Twitter), which represent an important resource for greater user engagement; they allow you to create a virtual reality on various platforms to communicate and make known your interests, opinions and preferences. The Internet, therefore, allows individuals, blogs, social networks, communities to provide their opinions, to give advice, to interact freely with other network browsers [25].

The power of the new media resides in the ability to shape a certain social reality. Users, even the less attentive, are to some extent invested by this power, transfer media information into the perception of their real world [26]. According to Growth Theory [27], mass media have a central role in spreading, through the use of determinated languages, specific representations of members of certain social categories; or the new media have the power to place viewers indirectly [28] with some members of such social groups and to offer information about them that will later become part of the real world of listeners. High exposure to such media distortions translates into perception that the over-represented phenomenon reflects the reality of the world around us. Similarly, it is possible to hypothesize that attitudes towards some social categories can be influenced by high exposure to negative and stereotyped representations diffused by mass media. If some social groups are frequently represented by the media in negative contexts [29], the most

attentive subjects will tend to formulate and express negative prejudices against members of such groups, as the information that will be most easily accessible to them will be the ones offered by the media (accessibility principle) [30].

In literature, it has also been shown that the media may, depending on particular historical circumstances, exercise the power to alter or exacerbate negative attitudes to social groups already subject to prejudice. For example, Persson and Musher-Eizenman [31] measured the level of prejudice against Arabs immediately after the September 11, 2001 terrorist attack; after that dramatic episode, the American media put in place a systematic association between the Arab and the terrorist group; the authors noted that the most exposed daily newsmakers through social networks, radio, television, or newspapers showed levels of prejudice to the Arabs more than those who were less likely to be present.

In a recent study, researchers from some German universities [27] have pointed out that new media influence the stereotypical representation of some minority social groups, not just by selecting information content (e.g., immigrants-crime), but also through the systematic use of a tendency language. According to Linguistic Integroup Bias (LIB) [32], the tendency to describe negative behavior of a member of the outgroup with a more abstract stylistic language, or characterized by a greater number of adjectives (e.g. A is aggressive) instead of descriptive verbs (e.g., A gave a punch to B) in the representation of a given target [33] leads to a generalization of that specific negative behavior also to all others members of the outgroup; in other words, the use of abstract language in reporting a crime related to an offense committed by an immigrant can lead the users to expect all immigrants to be dangerous criminals and to have a more discriminatory attitude towards them [34].

It is interesting to note, however, that according to other researchers the new media could be a useful tool to reduce social injury [28]. According to this perspective, media exposure would offer the possibility of indirect contact with members of a minority group, who would not be able to meet daily in real life; this para-social contact [28] would provide the basis for diminishing the negative prejudices against members of that group. This perspective is part of the important hypothesis of the contact formulated by G. Allport in 1954 [21] that the meeting, knowledge and cooperation between members of opposing social groups can lead to a reduction of negative inter-group social attitudes [35].

# 4 The Description of the Nursing World Through the Major Traditional Media

The influence of the mass media on the perception of nurses by the people is significant, which responds on the basis of fragmentary information intended to describe the nurse as a subject with incomplete training, accentuating the negative characteristics and the unpleasant episodes affecting patients. A certain kind of film and television production presents the figure of the nurse in an even offensive way, associating it with eroticism and sex; in these productions, the protagonists of healthcare continue to be physicians, who are always entrusted with the most important roles. Nurses, in the best case, are represented as people of great heart, but never as professionals with responsibilities and skills, indeed, appear frustrated, unhappy and gossip [36]. The aspects that arise are: the stereotype of crocerosine in love, attentive, authoritarian with colleagues and loving with patients, if woman; of the neglected nurse, disinterested in the patient, and complicit with colleagues if he is a man [36]. The mass media mainly spread images of men dragging in green slippers for the beautiful and stupid women corridors and women who play marginal roles in the hospital. A decisively offensive icon, but it makes the audience as well as the individual cases of malevolence then used as a measure of judgment. But repropagating negative stereotypes is nothing more than nurturing an everlower perception of the nursing world.

Thinking about the media representation of nurses, the fundamental themes described offer negative images of this profession. In general, a strong stereotype of nurses with limited skills in hotel activities emerges and nurses work in the shadow of the doctor. Since knowledge of nursing is derived not only from experiences but also from information transmitted by other subjects, these images favor the creation and spread of stereotypes, modifying and altering the many positive experiences.

Regarding this specific aspect, it is interesting to illustrate the image of nurses spread by traditional media, cinema and television (*medical drama*), and by new media. The small and the big screen, over the years, have shown, a stereotyped nurse figure, far from the reality and the consequent distorted consideration by public opinion. There are stories telling about movies or television shows that see nurses as protagonists or, in most cases, as marginal figures in the healthcare context. In particular, TV series have often examples of inappropriate attitudes by nurses and, therefore, it becomes difficult for spectators to figure out whether they match reality or are just the result of the inventory fantasy. As consequence, negative representations of practitioners can reduce therapeutic efficacy, as well as, extraordinary and unrealistic roles and actions can create high expectations, resulting in user frustration [37].

In the past, at the beginning in the Twenties and Thirties, the figure of nurses at cinema appears mainly in movies with stories t during the war, where the prevalent image of nurses is as "*white angel, eternal consoler*", which, in the suffering and pain of war, stands out for its moral and emotional hardening, as well as, for its goodness and feelings love.

Subsequently, in other movies, nurses were seen as the "angel of death, sadistic and assassin", opposite to the white angel or eternal consoler. Under the spotless shirt you can hide or masquerade a ruthless dark lady. Nurses exercise a strong power represented as a great delusion of omnipotence that reveals frustration and rigidity, when not a splitting of the psychotic character [37].

Finally, in few movies, the figure of nurses emerges as a simple "*earthly mediator*" who takes care of people needs, still angel, but this time nurses fell to the ground and used to struggle with the task of guarding and take care of those who cannot do it alone., especially children and the elderly [37]. Between the figures

illustrated, this last seems to be faithfully represented by the role that nurses usually assume, but perhaps the least role taken into account in various movies. Anyway, nurses in movies at cinema mainly are conceived with the crucial role of angel or lover, but also sexy figure.

Focusing the attention on TV, nurses' image emerging from medical drama is affected by the stories aimed to attract more and more audience, so very far from the reality. Therefore, TV often shows stories and representations as commonplace, for accepted situations that have marginal aspects of reality, but they are sufficient to increase the expectations of the public. Specifically, beautiful nurses, young and kind, with a great heart especially to leave room for love, are the winning mix for most television series [38]. In fact, the objective is always to strike the spectator, capture the attention, and for this reason, in medical drama, one prefers to tell the emotional and sentimental part rather than the professional aspect of people care [39].

Thus, in TV series, especially produced by US, nurses play an exclusively marginal role, compared to doctors and surgeons who are the protagonists.

With regard to the skills of nurses, they often deal with stretch bars, as well as, background activities that are not well framed. On the other hand, the coordinators' managerial skills are very clear and defined; however, a stereotyped gender difference emerges: coordinators point to reports that are not always professional and, often, indispensable, while the coordinator plays a crucial role, sought and involved in making decisions [37].

In summary, in TV series, nurses always take a marginal and secondary position and role compared to doctors, who remain the undisputed protagonist. It is not wrong, therefore, to argue that the various television productions reserved only nursing characters for roles or mere appearance. Therefore, to date, the figure of nurses fails to impose itself fully as a professional with skills and technical skills, but only the qualities related to the human sphere are recognized.

# 5 Text Analysis: The Image of Nurses from the New Media

*Text Analysis* (TA) refers to a mediated text analysis of the computer, that is, based not on text reading, but on an automatic analysis, especially when texts are very large. The automatic analysis of the texts aims to provide some representations of the contents of the texts studied (*corpus*) and to extract from them an information, that is, some properties through quantitative measurements. More specifically, automatic reading of text occurs by model; each model represents in itself a metric, that is, a lexical type (paradigmatic of the language used) or textual (e.g., syntagmatic of sense, understood as a general information in the corpus). From a statistical point of view, in this context, we also talk about *Automatic Textual Data Analysis* (AADT), highlighting the possibility of obtaining strictly qualitative information,

ranging from quantitative results, such as those typical of statistics. The logic of automatic analysis of texts on a statistical basis allows not only not to read the text, but to render its representations, regardless of language (e.g. a multilingual corpus such as the web) [40].

In this study we assume that the social representation of nursing profession is strongly affected by stereotypes and prejudices. To achieve the goal to reconstruct a nursing synthesis image we gathered information by Internet. Specifically, the contents of the social representation of nursing profession are outlined through the image transmitted by the websites. Indeed, this type of communication is a kind of cultural mediation, a filter and a means of spreading information that can be enjoyed by public opinion [41].

The sample consists of 50 articles in italian language published in the period 2008–2016 on the web: blogs, social media, specialized sites that collect information and considerations about nurses (e.g. Ipasvi, Nurse Times). In fact, after defining the set of documents to analyze, it begins to exam the sample (corpus), that is, the words that compose the documents/texts considered. A different numeric code and a list of all its occurring positions in the corpus correspond to each different form or word. The result of this step is the construction of the vocabulary of the corpus, that is, the list of all the different words that appear in the text. In addition, the corpus articles have been selected according to a pertinence criterion that only articles with the name "nurse" are considered in the title.

The lexicalization process radically modifies the linguistic structure of the corpus but allows for more reliable results for content analysis.

This automatic analysis of texts allows to outline the image of nursing profession. *Image* is a word of immediate understanding, but it is also an ambiguous concept in which different content is brought together that are solicited by a set of direct and indirect experiences, stereotypes and prejudices [42].

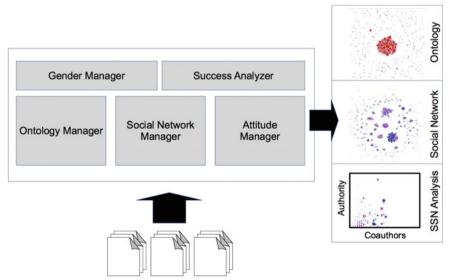
The result of this process is presented in Table 1 where it is clear the words presented several times in the selected articles and their frequencies, that is, the number of presences of a given word within the corpus. The main occurrences are *"nurse"* and *"to do"* because they are most commonly used within the corpus.

Through the graphic analysis, we can represent the two most frequent words within a speech map (Fig. 1). Words are grouped according to proximity measures and produce spontaneous classifications based on their proximity. The result of a display can therefore be interpreted as a summary of the topics covered in the text. Specifically, we have a series of ramifications that start from the two key words, "nurses" and "to do", with more words around the first as it has the highest number of frequencies. Finally, a further graphical synthesis of the analysis conducted in our study is provided by word-clouds.

It should be emphasized that, in textual statistics, graphic-based analysis have the advantage of being independent on language. It is a purely formal approach that prefers the (meaningful) signs to arrive at meaning (as a set of meanings) as a representation of content or "speech." The linguistic sign, as is well-known, is composed of a distinguished meaning from the "spoken" and/or "graphical" (written) point of view and of a meaning distinct from the "form" point of view

Occurrences	Frequencies
infermiere (nurse)	170
fare (to do)	112
medico (physician)	59
Infermieristico (nursing)	38
Paziente (patient)	32
anno (year)	30
professione (profession)	27
lavorare (to work)	26
figura (figure)	25
vita (life)	24
proprio (own)	22
sanitario (sanitary/health)	20
leggere (to read)	20
primo (first)	18
vedere (to see)	17
prendere (to take)	17
pensare (to think)	17
malato (sick person)	17
persona (person)	16
ospedale (hospital)	15
laurea (graduation)	15
cercare (to seek)	14

Table 1 Synthesis scheme of occurrences



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Fig. 1 Graphic representation text analysis

syntactic class": grammar, morphology and syntax and the "substance" (as a "semantic class") [43]. The underlying meaning of a text/speech that is meant to be represented by statistical methods is the system of meanings that is "held" on the basis of all the co-occurrences in the entire corpus of textual data [43].

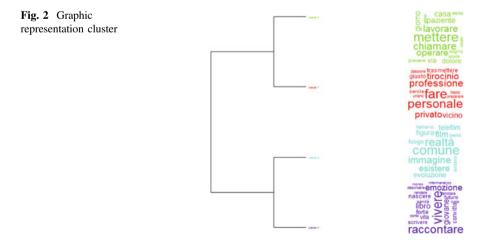
Additionally, in this textual analysis we adopt a cluster and segmentation method that aims to reduce the number of statistical units by providing a classification that can circumscribe catalogs, that simultaneously identify the characteristics of interest and, thus, allow to identify "word classes" or "text fragments" characterized by a strong internal homogeneity. Therefore, we divided the occurrences into 4 classes (clusters) always taking into consideration the focus of our research, that is, describing the perception of the image of nursing profession by public opinion.

From the cluster analysis (Reinhert hierarchic-method) [43], graphically represented in Fig. 2, four clusters emerged with the following parameters:

- Cluster 1 characterized by 23.6% of the different words that maximize  $\chi^2 = 0.01$  with good cluster separation;
- Cluster 2 characterized by 33.4% of the different words that maximize  $\chi^2 = 0.01$  and good cluster separation;
- Cluster 3 characterized by 26% of the different words that maximize  $\chi^2 = 0.01$  and good cluster separation;
- Cluster 4 characterized by 17% of the different words that maximize  $\chi^2 = 0.01$  and good cluster separation.

Thanks to this study, we evidence that the analysis of correspondence has highlighted how the image of nursing profession in public opinion is conditioned and deeply affected by stereotypes and prejudices, which is not only the result of the patient's direct experience but also of the "media building".

More specifically, there is a marked contrast between the medical and nursing professions, the two professions that virtually support the whole healthcare system.



In the word cloud the correspondence between the words nurse, patient and doctor is even more evident.

Nurses are often considered to be obedient and subordinated to doctors, with limited academic knowledge and limited self-employment. This phenomenon has contributed to the perception that nursing role is supportive, passive and subordinate to physicians. The low visibility attributed to the specific skills, knowledge and decision-making skills and the autonomy of nurses pushes toward a consequent wrong perception of nursing profession.

Therefore, the public opinion has still an inadequate perception of the role and activity of nurses as they are still living common and spread stereotypes and prejudices difficult to decay, despite the constant growth of this profession.

Today nurses have knowledge and skills acquired during their upper educational process at university, the profession is regulated by the Code of Ethics that contains ethical principles and commitments that guide professional behaviors.

Nevertheless, it is still unclear for people which characteristics modern nursing have: professionalism, competence, responsibility and attentiveness to all aspects of patient care. There is still in the collective imagination the idea of nurses armed with such goodwill, but often poorly prepared and trained. An image of negligent nurses, low professionalism, imperfection, inappropriate behavior or serious ethical-deontological shortcomings emerges. Then, patients emphasize the timely action of physicians without giving the right emphasis and the importance deserving the collaboration of nurses.

Ultimately, the widespread stereotyped picture of nurses minimizes the knowledge and abilities that nurses bring to the healthcare and welfare system. Much information is given only on trustworthiness, humanitarianism, dignity, understanding, and empathy of nurses, by diminishing the complex skills they acquire through training and experience, limiting them to a mere mission. Too often, it is omitted to talk about the links between nursing care and the reduction of hospital infections, falls, deceits complications, pulmonary embolism and deaths at hospital, without considering the relevance of nurses in avoiding all these negative facts. If people do not know what nurses do, they cannot really understand the contribution that training nurses brings to the care of sick people. It is therefore very important that the pragmatic message that nurses trained at university and experienced adds great value to patient care is spreading.

#### 6 Concluding Remarks

Thanks to the study conducted, it is possible to evidence that in modern society there are still ambiguities, prejudices, stereotypes and lack of knowledge about the figure of nurses. The stereotyped nurses' image, which some media are spreading, minimizes the knowledge and skills that nurses bring to the healthcare and welfare system. We believe that people need to know the extent of the scientific and medical knowledge that nurses must have in order to be able to practice their profession safely. People must appreciate the high level of interpersonal communication skills required by this professional figure in dealing with people in critical and challenging moments of their lives.

Most patients do not know the resources, social and organizational structures that need to be made available so that nurses can provide quality care and that is precisely this situation of non-knowledge by the citizen that prevents nurses from obtaining a proper social image and the resulting recognition. The link between nursing care and the reduction of main infections at hospital is often missing, without considering the crucial role of nurses to avoid these problems and their negative effects. The attention about nurses is mainly focused on a picture of reliability, humanitarianism, dedication, understanding and empathy. The complex skills and competences required for being nurses and acquired through training and experience are ignored, limiting nurses to a simple mission. Several years and many energies occur before nurses can get their social recognition; for that purpose, however, the decisive support of institutions is necessary so that the goals and efforts made are not wiped out.

This study, overcoming the existing limitations more related to the small sample considered and also including foreign websites, give a clear and interesting picture of the main stereotypes and prejudices linked to nurses in the Italian context.

In the future development of the study, we aim to amplify the corpus analyzed also considering international contexts as websites and identifying the main variables that can explain mostly the phenomenon, like e.g. the cultural orientation, level of disease, gender, seniority at work, and so forth.

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