

Empowering patients by empowering health care organizations: a comparative study

Carmela Annarumma

Department of Management and Innovation Systems
University of Salerno (Italy)
E-mail: cannarumma@unisa.it

Rocco Palumbo

Department of Management and Innovation Systems
University of Salerno (Italy)
E-mail: rpalumbo@unisa.it
Corresponding Author

Mauro Cavallone

Department of Management, Economics, and Quantitative Methods
University of Bergamo (Italy)
E-mail: mauro.cavallone@unibg.it

Abstract

The provision of health services is basically a co-creation process, where the patient acts as a critical co-producer of care. In fact, patient empowerment represents a cornerstone of the reforms which inspires the future shape of European health care systems. Ultimately, patient empowerment involves the “*patients' individual needs for developing autonomy and competence with their disease*” (Prigge, et al., 2015, p. 375). To the authors' knowledge, scientific literature has focused most of its attention on the process of patient enablement while the role played by health care organizations in empowering patients has been widely overlooked. Organizational health literacy is a fundamental ingredient in the recipe for increased patient empowerment. Indeed, organizational health literacy concerns the ability of health care organizations to establish clear and comfortable relationships with patients, involving them in a co-creating relationship. This paper is aimed at exploring the organizational health literacy of pharmacies, which operate as fundamental patient navigators in the current health care arena. For this purpose, a comparative study of 2 convenience samples of Italian pharmacies was performed. The findings of this research suggested that the units of analysis were aware of their role in enabling patients, but they did not conceive organizational health literacy as being either a strategic or a managerial tool to enhance their ability to empower patients and to engage them in the process of value co-creation. Further developments are needed to enhance the organizational health literacy of pharmacies and to increase their ability to perform as patient navigators.

Keywords

organizational health literacy; health literacy; health communication; patient-centered care; pharmacies

1. Introduction: framing patient empowerment in the health literacy perspective

Patient empowerment has been discussed as an innovative paradigm inspiring the provision of health services which involves a “*fundamental redefinition of roles and relationships of health care professionals and patients*” (Anderson & Funnell, 2005, p. 153). In fact, patients are encouraged and incited to develop and apply a comprehensive set of health-related skills and abilities which allow them to perform as the main carers of their own life (Funnell, et al., 1991). Self-determination and personal change are the main ideas at the basis of patient empowerment initiatives (Aujoulat, d'Hoore, & Deccache, 2007): education and information prompt the patients’ ability to deal with health-related issues and to participate in the provision of care (Bravo, et al., 2015).

Prigge and co-authors (2015) have recently examined the antecedents of patient empowerment, pointing out that the enhancement of individual health competencies is critical for achieving patient involvement in the design and delivery of care and for improving self-efficacy perception. From this point of view, health literacy – that is to say “*the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions*” (Baker, 2006, p. 878) – could be argued as a requisite to patient empowerment. In fact, several authors have claimed that patient empowerment initiatives may be counterproductive when addressed to people with limited health literacy (Wang, et al., 2016). Contrasting these arguments, Camerini and Schulz (2015) depicted health literacy and patient empowerment as independent and unrelated concepts. Nonetheless, the impacts produced by health literacy and patient empowerment are intertwined (Schulz & Nakamoto, 2013).

To the authors’ knowledge, both scholars and practitioners have concentrated their attention on the figure of the patient when depicting the attributes and the consequences of patient empowerment, focusing on: the states which allow patient involvement, the processes which lead to patients’ enablement, and the behaviours through which patients participate in the provision of care (Fumagalli, et al., 2014). Alternatively, the role of health care organizations in empowering patients and in stimulating their engagement in the delivery of care has been widely overlooked (Willis, et al., 2014).

Organizational health literacy is rapidly growing as an effective approach to serve high need populations and to improve the ability of patients to navigate the health care service system (Weaver, et al., 2012). Ultimately, organizational health literacy may be understood as the ability of health care organizations to establish a friendly and co-creating partnership with patients, encouraging them to be involved in the provision of health services (Palumbo, 2016). Brach and colleagues (2012) formerly identified ten attributes which suggest the adoption of a health literacy approach in structuring and designing health care organizations. Drawing on this proposition, a health literate health care organization: 1) has a leadership which makes health literacy integral to its mission, structure, and operations; 2) includes health literacy in its managerial actions, including planning, evaluation, patient safety, and quality improvement; 3) stimulates the awareness of the consequences of limited health literacy on health outcomes; 4) encourages the participation of the population served in the design and delivery of health information and services; 5) strives to meet the needs of the underserved population, overcoming stigma; 6) uses health literacy strategies in interpersonal communications at all points of contact with the patients; 7) supports patients in navigating the health care system; 8) provides, designs and distributes print and audio-visual materials that are easy to understand; 9) addresses the patients in high-risk situations, including care transitions and communications about medicines; 10) communicates in a friendly and clear way what health plans cover and what services are financed out-of-pocket.

Organizational health literacy has been described as a flexible approach which could be adapted to different kinds of health care organizations (Annarumma & Palumbo, 2016; Hernandez, 2013). Amongst others, pharmacies have been found to be aware of health literacy-related issues and to be willing to improve their ability to support the patient in navigating the health care service system (Palumbo & Annarumma, 2015). In fact, pharmacists are likely to perform as trusted patient navigators in the health care arena, being able to grasp the information needs of the latter and fill their knowledge gaps (Rosenthal, et al., 2014). Echoing these considerations, the scientific literature has variously found that pharmacists are able to help patients in handling complex drug regimens, play a critical role in inciting the self-management of care and encouraging significant life-style changes, provide patients with support and counselling to comply with the health treatments, and foster patient involvement in the provision of care (Collins, Barber, & Sahn, 2014; Johnson, Moser, & Garwood, 2013; Jennings & McAdam Marx, 2012; Abramowitz, 2009). Furthermore, the ability of pharmacists to meet patients' information needs has been discussed as a predictor of increased relationship commitment between the patients and the health care service system which, in turn, paves the way for better health outcomes (AlGhurair, Simpson, & Guirguis, 2012).

In light of these arguments, this paper has a twofold purpose. On the one hand, it is aimed at exploring whether organizational health literacy is understood as a strategic tool in two convenience samples of pharmacies operating in the Italian National Health Service (INHS); on the other hand, it examines what kinds of initiatives are arranged and implemented by Italian pharmacies in order to enhance organizational health literacy. A comparative approach was adopted in an attempt to identify either similarities or dissimilarities in the behavior of pharmacies operating in different health care sub-systems.

This paper is organized as follows: the second section briefly depicts the research design and methodology, providing several details on the two convenience samples which were built for the purpose of this research and on the tools which were used to assess the organizational health literacy of the units of analysis. The third section summarizes the main findings of the research, emphasizing that pharmacies could adopt different approaches to increase their organizational health literacy and to involve patients in a co-creating relationship. The findings of the research are critically discussed in the fourth section which lays the foundations for interesting conceptual and practical implications. The concluding section summarizes the relevance of this research, discussing organizational health literacy as a fundamental ingredient in the recipe for patient empowerment.

2. Research design and methodology

For the purpose of this study, a comparative research design was developed and implemented (Boddewyn, 1970). The comparative approach allowed to delve effectively into the novelty of the topic examined, leading to a more reliable understanding of pharmacies' awareness of organizational health literacy-related issues. Drawing on prevailing scientific literature (George, 1979), a focused and structured research method was devised. On the one hand, a strict focus on the organizational health literacy skills of pharmacies was adopted; on the other hand, a structured approach to assess the ability of pharmacies to establish a friendly and comfortable relationship with their users was embraced.

In line with the exploratory nature of this study, a theoretical sampling drove the identification of the units of analysis (Fox-Wolfgramm, 1997). Two convenience samples of both municipal and private pharmacies operating in two different regional sub-systems of the INHS were built. One sample consisted of thirty pharmacies operating within a health care

sub-system suffering from financial distress and whose governance model was mainly inspired by New Public Management principles (Sarto, et al., 2015). The second sample consisted of thirty pharmacies operating in a virtuous regional sub-system of the INHS steered according to a Public Governance approach (Bovaird & Löffler, 2009). In total, sixty units of analysis were included in this study; their organizational health literacy skills were examined in both absolute and comparative terms.

To assess the organizational health literacy levels of the units of analysis, a self-reporting survey was drawn up, based on the Health Literacy Assessment Tool which was devised by the US Agency for Healthcare Research and Quality (AHRQ) to evaluate the ability of pharmacies to meet patients' information and knowledge needs (Jacobson, et al., 2007). In particular, the Health Literacy Assessment Tool aims at assessing the health literacy-related readiness of pharmacies from three different points of view: environment, patients, and staff (O'Neal, et al., 2013). In light of the specific purposes of this study, neither the environment nor the patients perspectives were contemplated to assess the organizational health literacy of the units of analysis. Rather, attention was focused on the staff perspective, with the specific intent of appreciating the awareness of organizational health literacy-related issues on the side of the pharmacies' employees.

The items of the self-reporting survey concerned three key areas which dealt with three specific organizational health literacy domains: 1) the accessibility of printed informative materials; 2) the friendliness of interpersonal communication between the pharmacy staff and the patients; and 3) the sensitivity of the pharmacy staff to health literacy-related issues. The original English version of the assessment tool was independently translated in Italian by two scholars competent in the field of health management. The translation from English to Italian was realized in light of the institutional and organizational peculiarities of the INHS. The two drafts of the translated survey were duly compared in order to identify any divergences and to settle them. Whenever the translators were unable to settle their disagreements, a third independent scholar was invited to participate in the discussion in order to reach an agreed solution. The final draft of the Italian survey was translated back to English by a native English speaker, in order to check its consistency with the original version of the questionnaire. In addition, a pilot test was performed involving three pharmacies which were not included in the two convenience samples, but showed comparable characteristics with the units of analysis. The respondents were asked to fill in the survey and to disclose their perceived meaning for each item of the tool. The results of this pilot test highlighted several minor issues concerning a few items of the survey which were resolved in light of the respondents' comments.

A formative model was adopted according to which the three latent constructs of the self-reporting survey were determined as a combination of different items (Coltman, Midgley, & Veniak, 2008). It was assumed that: the items defined the constructs; the items were not interchangeable; any variation in the layout of the questionnaire implied significant changes in the conceptual domains of the constructs (Diamantopoulos & Sigauw, 2006). The final version of the survey consisted of 35 items, which were asymmetrically distributed in the three organizational health literacy domains: 9 items formed the "print materials" section; 11 items were included in the "clear verbal communication" area; and 15 items constituted the "sensitivity to literacy" domain.

Drawing on the original version of the Health Literacy Assessment Tool (O'Neal, et al., 2013; Jacobson, et al., 2007), a 9-point Likert scale was attached to each item of the survey: values close to 1 indicated a strong disagreement with the statement reported in the item, while values close to 9 revealed a strong agreement with it. Several items of the questionnaire were reversed, for the purpose of minimizing any risks of "response set" (Weijters, Cabooter, & Schillewaert, 2010); the risk of misresponse to reversed items was taken into consideration

when examining the data collected (Swain, Weathers, & Niedrich, 2008). The units of the analysis which showed a tendency to answer a series of questions following a preconceived schema were excluded from the analysis.

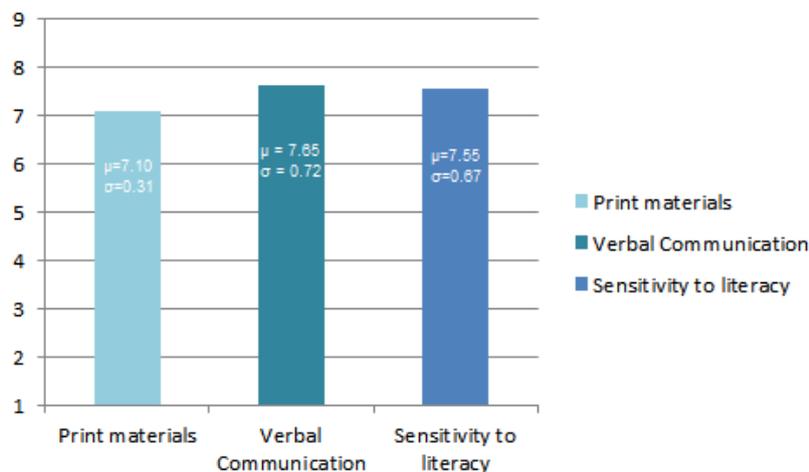
The survey was addressed to a single key informant for each unit of analysis. The pharmacy’s senior manager was identified as the preferred respondent. Whenever he or she was unable to participate in the research, a substitute employee of the pharmacy was approached, taking the length of service and the organizational position as the main eligibility criteria. The average age of the respondents was 42; they had a length of service ranging from 4 to 18 years. Approximately two out of three respondents were female. Most of the key informants were in charge of the management of the pharmacy. Less than one out of four respondents were pharmacy clerks. All the members of the sample were doctors of pharmacy.

3. Findings

3.1 The pharmacies’ awareness of organizational health literacy issues

Interestingly, all the units of analysis showed a significant awareness of health literacy-related issues. On average, as depicted in Figure 1, the pharmacies involved in the two convenience samples self-reported adequate health literacy levels for the three macro-items of the survey, that is to say “print materials”, “verbal communication”, and “sensitivity to literacy”.

Figure 1. Average scores for “print materials”, “clear verbal communication”, and “sensitivity to literacy” sections (n=60)



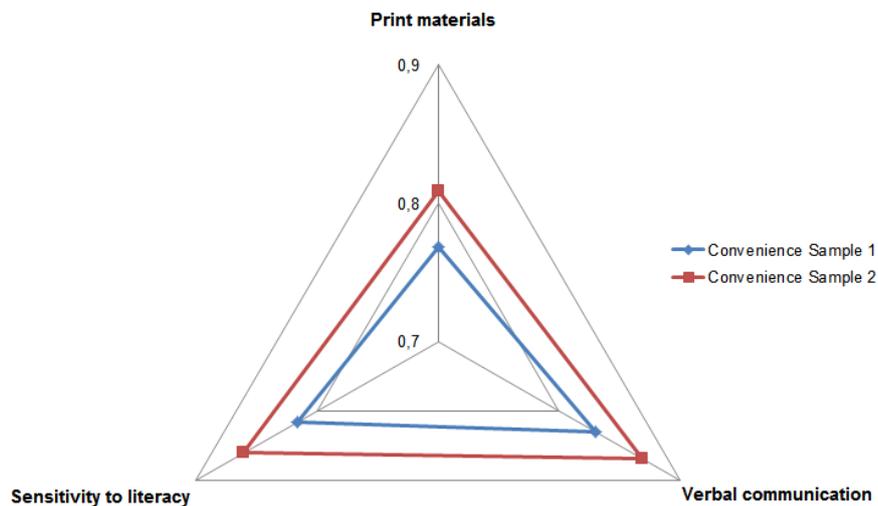
Source: Authors’ elaboration

In particular, the units of analysis showed the highest average value in the “verbal communication” section ($\mu = 7.65$; $\sigma = 0.72$). On the one hand, the respondents were consistent in claiming that they were aware of the difficulties met by patients in navigating the health care service system; from this point of view, the establishment of a friendly and comfortable relationship with the patients was widely presented as a critical approach to support patients in effectively accessing, collecting, and understanding relevant health information for the purposes of health protection and promotion. The units of analysis also revealed a high sensitivity to literacy ($\mu = 7.55$; $\sigma = 0.67$), identifying the problems incurred by patients in fully understanding and complying with clinical prescriptions as the most important determinant of poor health outcomes. The scores achieved in the “print materials”

section ($\mu = 7.10$; $\sigma = 0.31$) were high, but they were lower compared with both “verbal communication” and “sensitivity to literacy”. In short it could be argued that, in spite of the significant awareness of health literacy on the side of the units of analysis, several barriers prevented pharmacies from designing and implementing an organizational health literate environment.

The two samples revealed several peculiarities which suggested a potential influence of institutional variables and contingent factors on the willingness and ability of pharmacies to deal with health literacy related issues. As illustrated in Figure 2, the Convenience Sample 2, that is to say the pharmacies which operated in a virtuous regional sub-system of the INHS, were likely to disclose higher self-reported awareness of health literacy issues. This was true for all three themes of the survey. In fact, the units of analysis which belonged to the regional sub-system suffering from financial distress (Convenience Sample 1) were more likely to show a diluted sensitivity to health literacy as well as a lower attention to the design and implementation of an organizational health literate environment.

Figure 2. Average scores for “print materials”, “clear verbal communication”, and “sensitivity to literacy” sections for Convenience Sample 1 (n=30) and Convenience Sample 2 (n=30)

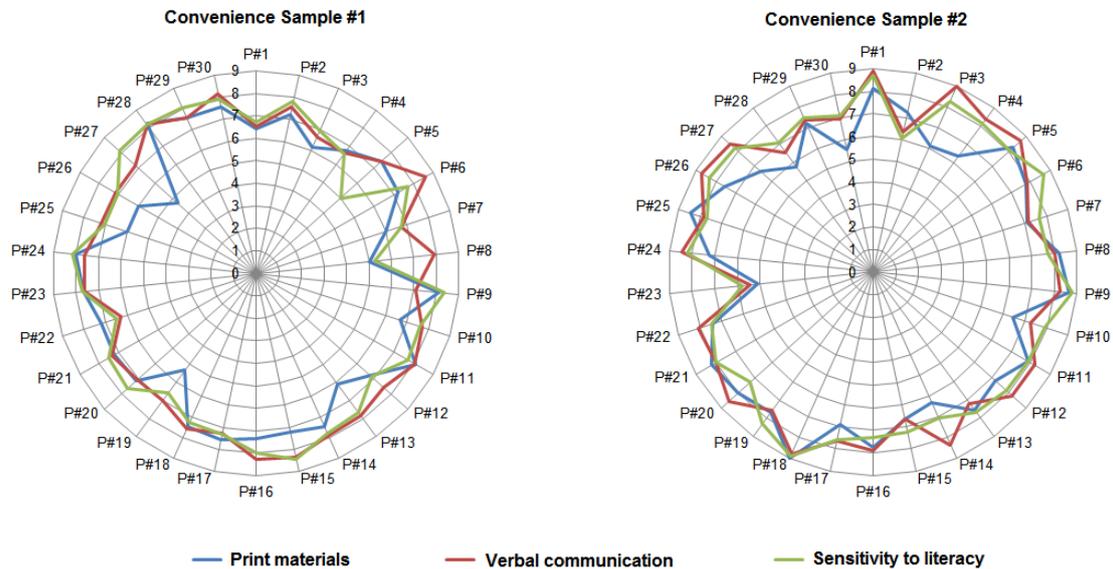


Source: Authors' elaboration

Figure 3 provides a more detailed description of the distinguishing behaviors of the two convenience samples which were built for the purpose of this study. On the one hand, Convenience Sample 1 exhibited more common inconsistencies between the different shades of organizational health literacy. In most of the cases, the pharmacies of the regional sub-system suffering from financial distress were likely to pay significant attention to the arrangement of clear verbal communication approaches in order to improve their ability to establish a co-creating relationship with the patients; however, this thoughtfulness towards health literacy does not seem to be echoed in terms of both design of friendly and easy-to-understand print materials or sensitivity to organizational health literacy-related issues. On the other hand, the units of Convenience Sample 2 showed a greater consistency in the scores for the three areas of the survey. The pharmacies which disclosed a high sensitivity to organizational health literacy were consistent in reporting a greater propensity to use both tailored communication strategies and friendly print materials to assist patients in navigating the health care environment. Alternatively, pharmacies disclosing limited sensitivity to

organizational health literacy issues were more likely to neglect the role of easy-to-understand written and oral information to improve the patients’ ability to deal with health-related issues.

Figure 3. Average scores by units of analysis (n=60) for “print materials”, “clear verbal communication”, and “sensitivity to literacy”



Source: Authors’ elaboration

In sum, all the units of analysis were found to be aware of the importance of organizational health literacy in designing a supportive and effective health care environment. This result did not seem to be affected by the contingency factors of the two regional sub-systems which were taken into consideration for the purpose of this study. Nonetheless, the pharmacies operating in the virtuous regional sub-system were more willing to adopt an organizational health literacy perspective in designing oral and print communication materials. The units of analysis belonging to the regional sub-system suffering from financial distress self-reported a greater propensity to use specific communication strategies in order to help their patients in navigating the health care arena. On the contrary, they paid only limited attention to the role played by print information materials in improving their organizational health literacy. In line with these considerations, the two samples disclosed different approaches and accounted for different initiatives to enhance pharmacies’ organizational health literacy.

3.2 The pharmacies’ initiatives to enhance organizational health literacy

The respondents involved in this study were consistent in reporting that they had devised tailored and effective signage to support the patients in navigating the environment of the pharmacy. In fact, the pharmacies’ employees perceived that people living with limited health literacy were not likely to ask health care professionals for additional information when they were concerned with a health-related issue. From this point of view, the adoption of an organizational health literacy approach in arranging print information materials was assumed to prevent the risks of confusion and misunderstanding on the side of patients. Besides, in most of the cases the organizational layout of the pharmacies was designed in light of the specific information needs of the population served, in order to allow a better access of patients to the services offered by the pharmacy.

Print information materials were primarily aimed at providing patients with useful information about timely health topics; in addition ongoing health-related issues were

depicted in posters and brochures which were devised according to both national and international guidelines. The units of analysis were also consistent in claiming that the language they used for the design of the health information materials was familiar, clear, and free of jargon, to increase the patients' ability to understand and process health information. Interestingly, only a few units of analysis in both the convenience samples reported using either tables or graphs to enhance the comprehensibility of health information materials. In other words, print information materials mainly consisted of text, with a limited use of images and charts to assist patients in processing and interpreting health information.

While the units of analysis of Convenience Sample 2 stated that they used both pamphlets and brochures to inform patients about the services offered, the pharmacies included in Convenience Sample 1 were not likely to do so. In addition, the employees of the pharmacies of Convenience Sample 1 were not encouraged to participate in specific training courses aimed at improving their ability to design and communicate friendly print information materials. Conversely, the units of analysis of Convenience Sample 2 were more engaged in encouraging their workforce to attend training courses ($\mu_{CS2} = 7.13$ vs. $\mu_{CS1} = 6.97$). The results of this research suggested that the units of analysis were aware of the importance of identifying an organizational delegate who is assigned to deal with problems concerning print information materials. Overall, only 14 out of 60 units of analysis stated encountering difficulties in identifying a staff member who could tackle problems with the print information materials provided by the pharmacies. This is especially true for the units of analysis of Convenience Sample 2 which showed greater difficulty ($\mu = 6.53$) as compared with the units of Convenience Sample 1 ($\mu = 7.03$) in identifying a pharmacy member to be appointed to deal with the friendliness of the print materials.

Both the pharmacies operating in the regional sub-system suffering from financial deprivation and those operating in the virtuous one encouraged their workforce to use a plain and clear language to explain medical jargon and clinical issues to the patients ($\mu_{CS1} = 7.73$ vs. $\mu_{CS2} = 8.40$). Most of the units of analysis of both the samples pointed out that the front-office employees were used to check the patients' understanding of the health information provided using the teach-back method, that is to say by asking the patients to repeat the key points of the messages communicated to them. To improve their communication strategies and to be more effective in interacting with patients, the pharmacy employees were likely to assess whether the patients were aware of the main health problem they were facing and of the importance of medication adherence to manage their health-related problems effectively.

While the units of analysis of Convenience Sample 2 revealed that they had a private space within the pharmacy where confidential information could be discussed with the patients, this was not true for the units of analysis of Convenience Sample 1. However, only 22 out of 60 units of analysis in both the convenience samples self-reported being able to manage effectively the relationship with patients for whom Italian was a second language by devising a tailored counselling service for them. Indeed, employees of the units of analysis were argued to be unable to meet the information needs of non-Italian speaking patients. Last but not least, the findings of the study suggested that the senior management of the pharmacies included in this study was not likely to launch specific policies aimed at raising the employees' awareness of organizational health literacy issues or at inciting the willingness of the latter to deal with them. This was particularly true with regard to the units of analysis of Convenience Sample 1 whose scores ($\mu = 6.97$) highlighted a weak commitment on the part of their senior management towards the promotion of these policies.

In general terms, all the units of analysis showed a significant sensitivity to literacy. Indeed, most of the respondents agreed in declaring that the patients' health literacy skills played an important role in improving their medication adherence and their compliance with clinical prescriptions. In line with these considerations, the pharmacy employees were

consistent in maintaining that their activity did not solely concern the delivery of drugs and medications; rather, they operated as crucial patient navigators, supporting them in effectively handling health information.

The participants in the research indicated several circumstances when the pharmacy staff had to pay particular attention to the health literacy skills of the patients, since the inadequate understanding of health information could pave the way for negative consequences on health outcomes. First of all, the changes in the health treatments prescribed to the patients were considered as critical events entailing a significant risk for impaired compliance and poor medication adherence: the lower the health literacy skills of the patients and the poorer the organizational health literacy of health care settings, the higher the risks that the change in health treatments could turn into reduced medication adherence and poorer health outcomes. Going into more detail, meaningful differences between the convenience samples were registered in handling changes in the health treatments and in coping with patients suffering from financial deprivation; in both circumstances, the units of Convenience Sample 1 performed worst as compared with those included in Convenience Sample 2. In addition, the patients' anger and irritation towards the functioning of the health care system has been considered to be difficult to manage by the pharmacy staff in both the convenience samples.

As compared with the units of analysis belonging to Convenience Sample 2, the pharmacies operating within the regional sub-system suffering from financial distress pointed out several difficulties incurred in meeting the information and knowledge needs of people living with limited health literacy when they had limited time to spend with the patients. Moreover, the members of Convenience Sample 1 self-reported that they faced problems when trying to adapt their communication strategies and approaches to the specific functional, interactive and critical competencies of low health literate patients. Besides, all the units of analysis stated that their employees were duly committed to providing patients with tailored and clear information about the attributes and the recommendations of over-the-counter drugs which were easily identifiable and procurable.

Overall, both in Convenience Sample 1 and in Convenience Sample 2, only a few pharmacies stated that the pharmacy staff attended specific training activities aimed at raising the employees' awareness of organizational health literacy-related issues. Besides, the senior management of the municipal pharmacies did not encourage the participation of the pharmacy staff in training activities in the field of health literacy, considering them not to be crucial to the improvement of organizational outcomes. Time and resource constraints were identified as the main barrier to the enhancement of the sensitivity to literacy of the pharmacies involved in the research.

4. Discussion

The pharmacies involved in this study reported a high awareness of organizational health literacy-related issues. Interestingly, the units of analysis showed high scores with regard to both print information materials, clear verbal communication, and sensitivity to literacy. Confirming the insights of the scientific literature identifying the enhancement of the patient-provider relationship as one of the most effective steps to establishing a link between health literacy and health outcomes (von Wagner, et al., 2009), the findings of this paper revealed that pharmacies paid particular attention to the oral interactions between the pharmacy staff and the patients. In fact, pharmacists are more likely to detect and meet the special information needs of low health literate patients, thus compensating for the propensity of physicians to overestimate individual health literacy skills (Kelly & Haidet, 2007).

In spite of these considerations, it seems that the organizational commitment of pharmacies to the enhancement of organizational health literacy is still poor (Palumbo & Annarumma, 2015). The pharmacy staff of the units of analysis included in both the convenience samples were consistent in reporting that time limitations and lack of interactive and linguistic skills were the most significant barriers to the establishment of adequate relationships with the patients, thus confirming what has been argued by scientific literature (Tarn, et al., 2006). This is especially true when patients have a strong need for timely and relevant health information since they face multiple diseases and have to comply with different medication treatments (Edwards, et al., 2015). However, most of the units of analysis reported that they were unable to provide patients with tailored health information materials, in order to aid their navigation of the health care service system.

Several additional considerations could be drawn from the comparison between the units of analysis of the two samples which were built for the purpose of this study, emphasizing both differences and agreements. From this point of view, an insightful reflection could be developed dealing with the willingness of pharmacies to increase the quantity and the quality of the information provided to patients. On the one hand, the units of analysis were found to be committed to improving their support of people living with limited health literacy. On the other hand, these initiatives were mainly led by individual employees, lacking an institutional legitimation. This situation was especially common among the pharmacies operating in the regional sub-system suffering from financial distress where the scarcity of resources available did not allow the units of analysis to pay adequate attention to the promotion of organizational health literacy. On the contrary, the units included in Convenience Sample 2 revealed a greater propensity for enhancing both the quality and the quantity of information provided to patients, in order to support them in effectively handling health-related issues.

In line with these arguments, the training of pharmacy staff aimed at boosting individual interactive skills appears to be a fundamental ingredient in the recipe for better patient-provider interactions. However, only a few pharmacies reported involving their employees in training activities in the fields of communication and health literacy. This finding is striking since most of the pharmacies were consistent in perceiving clear verbal communication as a strategic tool for improving the organizational ability to establish co-creating relationships with patients. In particular, interactive skills allow pharmacies to anticipate and meet the special information needs of four categories of patients at special risk of limited health literacy: 1) older adults; 2) people with a low level of education; 3) the disadvantaged population; and 4) immigrants who are not able to navigate the health care service system properly.

With specific regard to the latter, the number of immigrants currently living in Italy is rapidly growing as a result of the dramatic growth in the rates of three main categories of immigration: family class, economic immigrants, and refugees (Cavallone, 2007). Since pharmacies operate as an important point of contact between the patients and the health care service system and act as crucial patient navigators, they should advance their interactive skills for the final purpose of supporting immigrants in navigating the health system. To achieve this aim, tailored communication strategies and tools should be devised and implemented by improving the ability of pharmacies to deal with non-Italian speaking patients. They should provide customized messages, supported by translations in other languages (i.e. English first) and non-verbal or para-verbal components. Developing these arguments, it is worth noting that the item of the survey which showed the lowest average value ($\mu = 5.5$) was the statement: *“the pharmacy provides ad hoc services to patients for whom Italian is a second language or for non-Italian speaking patients”*. Therefore, there is a desperate need to fill the gap between the special information needs of immigrants and the ability of pharmacies to establish a friendly and comfortable relationship with them.

It is interesting to point out that the pharmacies operating in the regional sub-system suffering from financial stress performed better as compared with their counterparts operating in the virtuous sub-system in four items of the survey: 1) patient counselling; 2) employees involvement in specific training courses in the field of print information design and delivery; 3) ability to establish a friendly relationship with non-Italian speaking patients; and 4) introduction of tailored communication strategies to deal with people living with limited health literacy. These findings should be considered as a hint of the change that is affecting the units of analysis. Their strong awareness of health literacy-related issues could be conceived as a signal of their willingness to improve their strategies and operations, to anticipate and meet the growing needs of the population served.

The pharmacies included in Convenience Sample 2 were consistent in achieving higher scores as compared with their counterparts in Convenience Sample 1 in both the: “*use of brochures and pamphlets to provide patients with adequate information of the services offered by the pharmacy*” and the “*availability of a private space to discuss confidential topics with the patients*”. On the one hand, these findings suggest a greater entrepreneurial propensity of the pharmacies operating in the virtuous regional sub-system which is echoed by a wider availability of financial resources that could be addressed to organizational health literacy; on the other hand, they imply greater attention to the implicit information needs of patients. For the sake of argument, the “counselling corner”, which was found to be common among the pharmacies of Convenience Sample 2, is a catalyser for the establishment of friendly, comfortable and co-creating relationships between the patients and the providers, thus increasing the ability of the latter to anticipate and satisfy the expectations of the former. From this point of view, the greater ability of the pharmacies operating in the virtuous region to support the patients who had to deal with high-risk situations, including care transitions and anger towards the functioning and the organization of the health care service system, substantiates the worthiness of the inclusion of these issues in the design of the organizational and communicational framework of the pharmacies. These results confirm the value added by the ability of pharmacies to establish a friendly and co-creating relationship with the patients, which is not merely aimed at the sale of drugs and medications, but concerns the ability of patients to properly function in the health care environment.

The findings of this paper should be read in light of its limitations. Since the research concerned two convenience and non-representative samples of pharmacies operating within the INHS, it is not possible to claim the generalizability of the results. However, this study was able to provide several intriguing insights into the awareness of organizational health literacy of Italian pharmacies, emphasizing the similarities and the dissimilarities between entities operating in different regional sub-systems. Moreover, the decision to focus on the staff’s self-perception of organizational health literacy, ignoring both the environment and the patients’ points of view, affected the reliability of this research. Nevertheless, it allowed light to be shed on the importance of organizational health literacy within Italian pharmacies, thus paving the way for further developments. Future efforts will be addressed at expanding this research to a representative sample of Italian pharmacies, to strengthen the validity and the reliability of the arguments discussed above.

5. Conclusions

The relevance of this paper is twofold, suggesting both conceptual and practical implications. With regard to the former, organizational health literacy is becoming a key issue for the future of pharmacies, emphasizing their role as patient navigators. Scholars should be encouraged to examine the specific characteristics of organizational health literate

pharmacies. In particular, the attributes of print information materials, of verbal communication strategies and of organizational sensitivity to literacy should be discussed, for the purpose of increasing the ability of pharmacies to support low health literate patients in navigating the health care service system.

The organizational health literacy of pharmacies should be sought at both institutional and the managerial levels. On the one hand, the engagement of professional associations in the initiatives aimed at promoting the organizational health literacy of pharmacies is critical for fostering the adoption of a health literate approach in reimagining the relationship between the pharmacists and the patients. With specific regard to the Italian context, the Federation of the Orders of Italian Pharmacists (FOFI) could play a significant role in promoting the sensitivity to literacy of its associates, thus encouraging the involvement of pharmacies in the appropriate functioning of the health care service system. In fact, pharmacies should be understood as a critical knot of the local health care environment, which supports the patients in navigating the health system and in matching the levels of care they access with their specific health-related needs.

Finally, organizational health literacy should be conceived as a core idea inspiring the activities of all the pharmacies' human resources. In other words, health literacy should be dealt with as a driver to raise the awareness of the pharmacy's role in enhancing the effectiveness and the appropriateness of the health care service system. Accordingly, the willingness to improve the level of the organizational health literacy should be inspired by a systemic approach, thus involving both the pharmacists and all the members of staff. Adhering to these arguments, pharmacists would experience a significant evolution of their role. Rather than acting as drug sellers, they would represent critical mentors of their patients, providing them with advice and information which would allow an increased ability to effectively function within the health care environment. This will pave the way for both momentous improvements in patients' quality of life and in the strengthening of the sustainability of the health care service system. In summary, the findings of this research suggest that better health outcomes, less expenditure and a higher level of self-care could be reached by means of meaningful efforts in advancing the friendliness of health information and the communication of the pharmacies.

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