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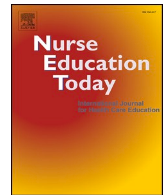

Italian nursing students' attitudes towards care of the dying patient: A multi-center descriptive study

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A R T I C L E I N F O

Keywords:
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Education
Experience
Multi-center study

A B S T R A C T

Background: International literature reports that nursing students feel unprepared when facing patients and families within dying care. They consider their curricula inadequate in teaching end-of-life care and promoting the attitudes required to care for dying patients. Findings of recent studies exploring nursing students' attitudes towards care of the dying patient are often contradictory.
Objectives: To explore Italian nursing students' attitudes towards caring for dying patients.
Design: A multicenter cross-sectional study was conducted.
Settings: The Bachelor's Degree in Nursing courses of four Universities of the Lazio Region.
Participants: The sample included 1193 students.
Methods: Data were collected between September 2017 and March 2018 using the Italian version of FATCOD-B-I. The differences between the mean scores were compared through *t*-test or ANOVA. Associations between scores and participant characteristics were evaluated through generalized linear regression.
Results: The mean score of FATCOD-B-I was 115.3 (SD = 9.1). Higher scores were significantly associated with training in palliative care ($p < 0.0001$) and experience with terminally ill patients ($p < 0.0001$). Students manifested more negative attitudes when they perceived patients losing hope of recovering, and patient's family members interfering with health professionals' work. Uncertainties emerged around knowledge of opioid drugs, decision-making, concepts of death and dying, management of mourning, and relational aspects of patient care.
Conclusions: Italian nursing students seem to have more positive attitudes towards care of dying patients than most other countries. They believe that caring for a terminal patient is a formative, useful experience but they do not feel adequately prepared in practice. Deeper palliative care education, integrated with practical training, would prepare students better, enabling them to discover their own human and professional capacity to relieve suffering.

1. Introduction

Death is a human phenomenon conceived as a natural process (Arslan et al., 2014). It is one of the most emotional experiences that often forces people to deal with questions about the meaning of life, the existence of the soul, and the possibility of an afterlife (Rosdahl and

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Kowalski, 2008). The concept of death is deeply influenced by cultural, ethnic, and religious beliefs that shape people's attitude in facing it (Ramadas and Kuttichira, 2013; Rosdahl and Kowalski, 2008).

Health professionals deal with patients' deaths and their families' grief almost on a daily basis (Razban et al., 2013). Among healthcare team members, nurses are those who spend longest with dying patients and their families (Ramjan et al., 2010). This part of nursing care is hard and sometimes may be distressing (Mok and Kam-yuet, 2002; Wilson and Kirshbaum, 2011). Facing death can create significant professional and personal stress for nurses, triggering feelings such as helplessness, nervousness, guilt, regrets, sadness, anxiety, frustration, anger and repulsion (Zheng et al., 2016). These can in turn generate negative attitudes towards caring for dying patients (Anderson et al., 2015).

Nurses' attitudes towards end-of-life care are an important factor impacting the quality of the care they provide to patients and families (Peters et al., 2013; Razban et al., 2013). High-quality end-of-life care is possible only if nurses are adequately prepared, with good interpersonal skills and personal coping strategies developed and consolidated through specific education (Kent et al., 2012; Mok and Kam-yuet, 2002). In fact, evidence suggests that end-of-life care education is one of the most significant factors affecting nurses' attitudes towards care of the dying (Barrere et al., 2008). Specific training improves nursing students' knowledge and skills about end-of-life, increases self-awareness on death, and positive attitudes and caring behaviors towards dying patients, allowing students to provide culturally sensitive care (Mok and Kam-yuet, 2002). However, to orientate nursing education appropriately, more knowledge about students' attitudes to end-of-life care and caring for dying patients is needed (Leombruni et al., 2014).

2. Background

Overall, international literature reports that nursing students feel unprepared when they face patients and families within dying care (Gillan et al., 2014; Wallace et al., 2009). Their major concerns regard their fears and reactions to seeing a dying or dead person, and their anxiety about not being able to support patients and families (Gillan et al., 2014). For them, dealing with their own feelings and at the same time providing care is challenging (Karlsson et al., 2015). Moreover, nursing students consider their curricula inadequate in teaching end-of-life care and fostering the development of the attitudes required to care for dying patients (Lloyd-Williams and Field, 2002; Wallace et al., 2009).

Several studies have been conducted on nursing students' attitudes towards care of the dying, identifying some factors that could affect them positively or negatively. These factors are: age, gender, religious beliefs, professional and/or personal experience, and end-of-life care education (Yaqoob et al., 2018). Findings of recent studies exploring nursing students' attitudes towards care of dying patients are often contradictory. For instance, a cross-sectional study conducted in the United Kingdom (Grubb and Arthur, 2016) and two studies conducted in Sweden (Berndtsson et al., 2019; Henoch et al., 2017), respectively pre-post and longitudinal studies, found that students had positive attitudes that improved with specific education. From Iran, Jafari et al. (2015) reported negative to neutral attitudes, showing that education improved students' attitudes significantly, with no relationship to experience. Two quantitative descriptive studies conducted respectively in Indonesia (A'la et al., 2018) and Jordan (Sharour et al., 2017), reported mainly negative attitudes that were affected by age, with mature or older students showing less negative attitudes than younger ones. Another study conducted on third-year students of nursing school in Turkey, revealed that nursing students had moderately positive attitudes towards caring for the dying, and that their experiences in clinical settings affected their attitudes towards death positively (Arslan et al., 2014). In Italy, Leombruni et al.'s, 2014 study examined nursing students' attitudes, which seemed quite negative. Professional experience was identified as an element that influences attitudes, while gender was not. However, the small sample size precluded definitive conclusions and its results would need to be reinforced (Leombruni et al., 2014).

The Frommelt Attitudes towards the Care of the Dying (FATCOD) is the most widely used, reliable measure of attitudes towards caring for dying patients (Lippe et al., 2018) and it is the only psychometrically-tested instrument specifically detecting nursing students' attitudes (Leombruni et al., 2014). Most of the above studies used the FATCOD Form B (FATCOD-B), which is the form for students and is also available in Italian (Mastroianni et al., 2009; Mastroianni et al., 2015). Using this tool would allow comparison with previous studies, thus contributing to the discussion internationally. Therefore, our study aimed to explore nursing students' attitudes towards caring for dying patients using the Italian version of FATCOD Form B (FATCOD-B-I).

3. Methods

3.1. Design

A multicenter cross-sectional study was conducted.

3.2. Participants and setting

The study involved the Bachelor's Degree in Nursing courses of all four Universities of the Lazio Region, which together hold about 25% of the available nursing seats assigned at the national level (Mastrillo, 2019). For each University, at least one location of the degree course was selected and the study was proposed to all students enrolled in the 1st, 2nd, and 3rd years in that location.

3.3. Data collection

Data were collected between September 2017 and March 2018. The instrument used was FATCOD-B-I (Mastroianni et al., 2009). This self-report questionnaire consists of 30 items in which statements relating to death and to assisting the dying are reported. Fifteen items (items 1, 2, 4, 10, 12, 16, 18, 20, 21, 22, 23, 24, 25, 27, and 30) are formulated positively, and the remaining 15 negatively. The response scale is a 5-point Likert type. For positive items, a score is given ranging from 1 "Strongly disagree" to 5 "Strongly agree". For negative items, the score is reversed. The total score ranges between a minimum of 30 and a maximum of 150, with higher scores indicating more positive attitudes.

Several studies described different factorial structures of the tool (Edo-Gual et al., 2014; Wang et al., 2016; Henoch et al., 2017). Specifically, two different versions of the FATCOD-B-I are available (Mastroianni et al., 2015; Leombruni et al., 2014), whose reliability requires further confirmatory studies (Leombruni et al., 2014; Mastroianni et al., 2015). For this reason, the data of our study were elaborated and discussed in coordination with previous studies (Grubb and Arthur, 2016; Sherin et al., 2019) through the calculation of the percentage scores. Scores >65% of the total possible score (>97.5) were considered as positive attitudes; between 50% and 65% (>75 - <97.5) as neutral; and below 50% (<75) as negative. The FATCOD-B-I also includes questions about socio-personal data, such as age, gender, religious belief, education, and grief assistance experiences.

3.4. Statistical analysis

The statistical analysis was carried out using the IBM SPSS version 22.0 software. Descriptive statistics (averages, frequencies) were conducted both for the scores of the factors of the FATCOD-B-I scale and for the socio-demographic data (age, gender, course year, palliative care experience, palliative care training) of the sample. The differences between the averages of the scores obtained were compared through *t*-test or ANOVA. The differences were considered significant with $p < 0.05$. A generalized linear regression model was applied to assess significant associations between scores and students' socio-demographic and

experiential characteristics; unadjusted and adjusted differences were estimated.

3.5. Ethical considerations

The study was conducted following the principles of the Helsinki Declaration (World Medical Association, 2013) and was approved by the local Ethics Committee (Protocol number: 2018/CE Lazio1 09/10/2017). Students received detailed oral and written information about the study. Those who agreed to participate signed an informed consent form. Participants' anonymity was guaranteed during the entire data analysis and reporting process.

4. Results

Of the 1214 questionnaires administered, 1193 (98%) were complete and analyzed. The participants were mainly female ($N = 897$, 75%) with a mean age of 22 years. The distribution of students over the three years of the course and their characteristics are reported in Table 1.

53% of the sample ($N = 633$) declared they had not received Palliative Care training. Those who had ($N = 360$, 47%) reported that it was mainly theoretical ($N = 272$, 22.8%) or mixed theoretical-practical ($N = 162$, 14%). 66% of the students ($N = 784$) had experience of assisting dying people mainly during their internship ($N = 458$; 38%) or through personal experiences ($N = 308$, 26%). 80% ($N = 958$) of the sample had personal experiences of mourning the loss of a family member or significant person. Most nursing students ($N = 963$, 81%) reported belonging to the Catholic religion, although 60% ($N = 711$) stated that their beliefs do not influence their attitudes towards death or influence them very little.

The average FATCOD-B-I score was 115.3 (Standard Deviation SD = 9.1). The great majority of students ($N = 1163$, 97%) showed positive attitudes with a score higher than 97.5 (>65% of the total score of the instrument). Thirty students (2.5%) showed neutral attitudes with scores between 97.5 and 75 (50% - 65% of the possible score) and no student scored negative (Table 2).

Tables 3 and 4 show the distribution of mean scores (MS) ranging 1–5, for the individual items of the FATCOD-B-I, respectively divided between positive and negative. Analysis of the mean scores of the positive items (Table 3) showed that students had more positive attitudes about the family's role in improving the patient's quality of life (item 18, MS 4.8; item 20, MS 4.5) and considering the experience with a terminal patient as formative and useful (item1, MS 4.6).

By contrast, analysis of the mean scores for negative items (Table 4), showed that students manifested more negative attitudes when patients lost hope of recovery (item 8, MS 2.6) and when relationships with relatives interfered with health professionals' work (item 29; MS 2.8). It also emerged that students did not consider caring for a terminal patient as frustrating (item 7; MS 4.1), did not express escapist attitudes towards death (item 15, MS 4.2; item 5, MS 4.3), and recognized preparing families for the death of their loved one as a nursing responsibility (item 28, MS 4.2).

Analysis of items with mean scores >3 and <4 (neutral attitudes) highlighted the circumstances or welfare situations in which students presented greater uncertainty. Insecurities emerged about: knowledge about opioid drugs (item 25), decision-making (items 19, 24), concepts of death and dying (items 2, 10), and management of bereavement (item 4). Uncertainties also emerged on the relational aspects of caring for terminal patients (items 9, 13, 14, 17, 26) and communication aspects

Table 1
Demographic and experiential characteristics of nursing students ($n = 1193$).

Students' characteristics	N (%)
Gender	
Male	296 (25)
Female	897 (75)
Age (years)	
≤20	473 (40)
21–25	565 (47)
≥26	155 (13)
Year of study	
One	462 (39)
Two	321 (27)
Three or+	410 (34)
PC education	
No	633 (53)
Theoretical training	72 (23)
Practical training	41 (3)
Theoretical-practical training	162 (14)
Information	85 (7)
Previous experience with dying individuals	
No	409 (34)
Clinical training	458 (38)
Personal experience	308 (26)
Work experience	18 (2)
Previous bereavement experience	
No	235 (20)
Yes	958 (80)
Religion	
Catholic	963 (81)
Other	58 (5)
No religious affiliation	172 (14)

Table 2
Distribution of FATCOD-BI score within student sample.

FATCOD-BI score attitudes	Nursing students N (%)
Positive (> 65% of the total score of FATCOD Scale)	1163 (97%)
Neutral (50% - 65% of the total FATCOD Scale)	30 (2.5%)
Negative (<50% of the total FATCOD Scale)	0

Table 3
Distribution of the positive items mean scores of Frommelt Attitudes Towards Care of the Dying Scale (FATCOD-B-I).

Item number	FATCOD-B-I positive items	Mean (DS)
18	Families should be concerned about helping their dying member make the best of his/her remaining life	4.8 (0.6)
1	Giving care to the dying person is a worthwhile experience.	4.6 (0.6)
20	Families should maintain as normal an environment as possible for their dying member	4.5 (0.7)
12	The family should be involved in the physical care of the dying person	4.4 (0.8)
16	Families need emotional support to accept the behavior changes of the dying person	4.4 (0.7)
23	Care-givers should permit dying persons to have flexible visiting schedules	4.3 (0.8)
21	It is beneficial for the dying person to verbalize his/her feelings	4.2 (0.8)
22	Care should extend to the family of the dying person	4.2 (0.8)
27	Dying persons should be given honest answers about their condition	4.2 (0.8)
30	It is possible for non-family care-givers to help patients prepare for death	4.2 (0.8)
24	The dying person and his/her family should be the in-charge decision makers	3.7 (1)
10	There are times when death is welcomed by the dying person	3.7 (0.9)
4	Caring for the patient's family should continue throughout the period of grief and bereavement	3.6 (0.9)
2	Death is not the worst thing that can happen to a person	3.2 (1.2)
25	Addiction to pain relieving medication should not be a concern when dealing with a dying person	3.1 (1.1)

Note: The means were calculated based on the following values of the Likert scale: 1 = I strongly disagree; 2 = I disagree; 3 = I do not know; 4 = I agree; 5 = I strongly agree.

Table 4
Distribution of the negative items mean scores of Frommelt Attitudes Towards Care of the Dying Scale (FATCOD-B-I).

Item number	FATCOD negative item	Mean (DS)
5.	I would not want to care for a dying person	4.3 (0.9)
28.	Educating families about death and dying is not a non-family care-givers responsibility	4.2 (1)
15.	I would feel like running away when the person actually died	4.2 (0.9)
7.	The length of time required to give care to a dying person would frustrate me	4.1 (0.9)
19.	The dying person should not be allowed to make decisions about his/her physical care	3.8 (1.1)
14.	I am afraid to become friends with a dying person	3.7 (1.2)
13.	I would hope the person I'm caring for dies when I am not present	3.7 (1)
6.	The non-family care-givers should not be the one to talk about death with the dying person	3.6 (1.1)
9.	It is difficult to form a close relationship with the dying person	3.6 (1.1)
11.	When a patient asks, "Am I dying?", I think it is best to change the subject to something cheerful	3.6 (1.1)
17.	As a patient nears death, the non-family care-giver should withdraw from his/her involvement with the patient	3.5 (1.2)
26.	I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying	3.2 (1)
3.	I would be uncomfortable talking about impending death with the dying person	3.1 (1)
29.	Family members who stay close to a dying person often interfere with the professionals' job with the patient	2.8 (1)
8.	I would be upset when the dying person I was caring for gave up hope of getting better	2.6 (1)

Note: The means were calculated based on the following values of the Likert scale: 1 = I strongly agree; 2 = I agree; 3 = I don't know; 4 = I disagree; 5 = I strongly disagree.

(items 3, 6, 11).

Generalized linear regression analysis showed age ($p < 0.0001$), course year ($p < 0.0001$), previous palliative care training ($p < 0.0001$) and previous experience with terminally ill patients ($p < 0.0001$) as the only variables significantly associated with higher FATCOD-B-I scores. After statistical adjustment of these four factors between each other, only palliative care training ($p = 0.001$) and previous personal/professional experience with dying people ($p < 0.0001$) were associated with more positive attitudes (Table 5).

5. Discussion

This study aimed to explore nursing students' attitudes towards caring for dying patients using FATCOD-B-I. Overall, the attitudes of Italian students seem to be more positive than those reported in similar studies carried out in Japan and Sri Lanka (Nandasena et al., 2017), Indonesia (A'la et al., 2018), India (Paul et al., 2019), Iran (Jafari et al., 2015), Turkey (Cerit, 2019; Gurdogan et al., 2019), Greece (Dimoula et al., 2019), and England (Grubb and Arthur, 2016) and more negative than those reported by Swedish studies (Berndtsson et al., 2019; Hagelin et al., 2016; Henoch et al., 2017). Moreover, the average FATCOD-B-I total score of our sample confirms the results of the preliminary study carried out in Italy by Leombruni et al. (2014). The wide variability between countries suggests how culture can influence the formation of attitudes regarding death and dying (Jiang et al., 2019): individuals' cultural beliefs, values, and norms both reflect those of the society to which they belong and shape their attitudes (Max and MacKenzie, 2017). In fact, attitudes can incorporate and express cultural differences (Pentaris, 2011).

Consistent with other studies, our study shows that the most predictive variables for the development of positive attitudes are education (A'la et al., 2018; Berndtsson et al., 2019; Grubb and Arthur, 2016; Henoch et al., 2017) and previous experience with dying people (Arslan et al., 2014; Leombruni et al., 2014). Education and experience expose students to both theoretical and experiential learning processes capable of modeling and transforming their attitudes towards the concept of death and care for dying patients (Gillan et al., 2014; Henoch et al., 2017; Kurz and Hayes, 2006). Attitudes related to end-of-life care are formed during nursing students' educational programs (Kurz and Hayes, 2006). The literature shows that a significant amount of both didactic and clinical end-of-life content in undergraduate nursing curricula is particularly impactful on those attitudes that were neutral in students of our study (Ballesteros et al., 2014). In fact, from the students' perspective, palliative care courses provide specific knowledge (use of opioid drugs); techniques or procedures that prepare them to deal appropriately with difficult situations (decision-making); and other support tools to alleviate patients' and family suffering (Ballesteros et al., 2014). Moreover, students note that the course provides a more comprehensive view of the nursing discipline, helping them to reflect on and discuss concepts of death and dying (Ek et al., 2014), and to become more sensitive to patients' needs (Mount, 2013; Roman Maestre, 2013). Students report experiencing difficulties in answering patient's questions, and feeling like intruders when discussing very personal problems with patients, such as death (Wang, 2019). The course prepares them to empathize and communicate better with patients, allowing them to discover their own human and professional capacity to relieve suffering (Ballesteros et al., 2014).

Our study reports that nursing students consider clinical experience as the most important and effective way to learn how to care for dying patients (Wang, 2019), and that experience with them is formative and useful (Abu-El-Noor and Abu-El-Noor, 2016; Dimoula et al., 2019; Hagelin et al., 2016; Leombruni et al., 2014). To develop a positive attitude towards the care of dying patients, therefore, it is important that palliative care is incorporated in the curriculum, guaranteeing students not only theoretical but also practical, hands-on, compulsory training in

Table 5
Differences in FATCOD-B-I score means between age, year of study, exposure to PC education and previous experience with dying – unadjusted and adjusted values.

	Mean (SD)	Unadjusted mean difference	Unadjusted *P* value	Adjusted mean difference	Adjusted P value
Age			<0.0001		0.62
≤20 years	76.0 (6.1)	Reference		Reference	
21–25 years	77.4 (5.7)	1.40 (0.67–2.13)		0.07 (−0.81–0.96)	
≥26 years	77.7 (7.0)	1.71 (0.62–2.79)		0.54 (−0.63–1.71)	
Year			<0.0001		0.29
One	75.7 (6.0)	Reference		Reference	
Two	77.3 (6.0)	1.60 (0.75–2.44)		0.72(−0.18–1.63)	
Three or +	77.9 (5.9)	2.23 (1.44–3.02)		0.46 (−0.64–1.57)	
PC education			<0.0001		0.001
No	75.9 (6.0)	Reference		Reference	
Yes	78.0 (5.9)	2.11 (1.44–2.79)		1.42 (0.59–2.25)	
Previous experience			<0.0001		<0.0001
No	75.3 (5.9)	Reference		Reference	
Yes	77.7 (5.9)	2.41 (1.70–2.12)		1.84 (1.08–2.59)	

this specific care setting (Sherin et al., 2019).

Several qualitative studies have explored the experience of nursing students in assisting dying patients. These studies' findings support our results showing that gratification, personal and professional growth coming from care for the dying are recurrent themes (Garrino et al., 2017; Edo-Gual et al., 2014). In fact, despite the strong emotional impact that the experience provides (Gillan et al., 2014; Karlsson et al., 2015), within the practical training students learn that death is part of the life-cycle, and become aware that a full life can be lived even at the end of life. They learn that caregivers can help give value to every moment of patients' lives until the moment of death (Edo-Gual et al., 2014). Our study reports that nursing students perceive patients' lack of hope negatively, not knowing how to deal with the emotional reactions produced in the nurse-patient relationship (Parry, 2011; Van der Wath and Du Toit, 2015). Talking about it, and sharing their own feelings are among the most helpful supports for students in treating dying patients (Chow et al., 2014; Edo-Gual et al., 2014; Poultney et al., 2014). Students who learn to recognize their own emotions can transform them positively, coming to understand that the care they offer helps ensure that patients' end-of-life is lived in the best possible way (Garrino et al., 2017).

Finally, attitudes towards family members' involvement in the care process are conflicting. On the one hand, students believe that families should be involved in making decisions for patients (Wang, 2019); on the other, they are concerned about their interference in the work of health professionals. Practical care management and treatment decisions for patients during end-of-life often result in disagreements between family members and healthcare providers (Lichtenthal and Kissane, 2008). Students recognize that family support and involvement in care is a nursing responsibility (Tarberg et al., 2019), but that it also presupposes knowledge, educational and psychosocial skills that they are not always able to develop during their studies (Mattila et al., 2009; Mastroianni et al., 2019). Here the literature highlights the importance of the clinical preceptor (Wang, 2019), who should both offer a behavioral reference for students on how to relate to the dying patient's family, and also be able to comprehend students' lived experience with terminally ill patients and their families, helping them to reflect on them (Parry, 2011). This helps promote a family-centered approach, which is a core aspect of the palliative care model (Morris et al., 2015), and increases the likelihood of successful resolution of family strain, and optimal care for the patient and all involved (Lichtenthal and Kissane, 2008).

A limitation of this study is that the results were obtained in a convenience, although representative, sample of the nursing student population of Rome.

6. Conclusion

The results of this study highlight that Italian nursing students have more positive attitudes towards care of dying patients than most other countries. The most predictive variables for the development of positive attitudes are education and experience with dying people, which expose students to both theoretical and experiential learning processes capable of modeling and transforming their attitudes towards the concept of death and care for dying patients. Students show negative attitudes in situations where patients lose hope of recovering. However, they do not believe that caring for a terminal patient is frustrating, but that is a formative and useful experience. Attitudes towards family members' involvement in the care process are conflicting. Despite recognizing that family support and involvement in care is a nursing responsibility, students do not feel adequately prepared to act accordingly.

Deeper and broader palliative care education is needed to prepare students to empathize and communicate better with patients and families, allowing them to discover their own human and professional capacity to relieve suffering. Practical experience teaches students that a full life is possible even at end-of-life, and that nurses can contribute value to every moment of patients' lives.

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Ethical approval

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Chiara Mastroianni: Conceptualization, Methodology, Formal analysis, Investigation, Data Curation, Writing - Original Draft, Writing - Review & Editing
Anna Marchetti: Methodology, Formal analysis, Data Curation, Writing - Original Draft, Writing - Review & Editing
Daniela D'Angelo: Conceptualization, Methodology, Writing - Review & Editing
Marco Artico: Methodology, Writing - Review & Editing
Diana Giannarelli: Software, Formal analysis
Elisa Magna: Writing - Review & Editing
Paolo Carlo Motta: Supervision, Writing - Review & Editing
Michela Piredda: Methodology, Supervision, Writing - Original Draft, Writing - Review & Editing
Maria Grazia De Marinis: Conceptualization, Methodology, Supervision, Project administration, Writing - Review & Editing

Declaration of competing interest

No conflict of interest has been declared by the authors.

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