Article

Attitudes Toward Active Voluntary Euthanasia Among Community-Dwelling Older Subjects

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Abstract

The major extension of late-life expectancy has increased the significance of end-of-life issues, particularly among elderly people, considering both the role of medical practices in shaping and defining dying trajectories and the differences in national laws and in public attitudes about preservation of self-dignity and removal of pain in death. Avoiding a prolonged, painful, and undignified death provides for many a rationale for euthanasia. On the contrary, the fear of increased pressure to end one's life prematurely and of potential abuses became often the main argument of opposition among vulnerable groups, like older people, especially when suffering from disability, chronic diseases, and lacking of autonomy. Through a representative cross-sectional survey, we studied 1,782 community-dwelling over-65s residents in Genoa (Italy), examining with bivariate and binary logistic regression analysis their attitudes toward active voluntary euthanasia (AVE), and exploring associations with sociodemographic characteristics, health and socioeconomic conditions, ideological orientations, and cultural practices. About 39.9% of our sample fully disagreed with AVE, 26.7% expressed tolerance, and 35.2% agreed completely. Results showed significant associations of different attitudes toward AVE with cultural values and moral practices, as well as with health and disability conditions, evidencing increasing full rejection toward AVE among over-75s profiles (46.3%). Our results suggest major intergenerational differences among older people, showing significant cultural change in attitudes toward end-of-life issues. If and to the extent that older age plays a role, it is rather still strongly associated with rejection than with acceptance of AVE.

Keywords

euthanasia, end-of-life care, aging, disability, baby boomers

Introduction and Theoretical Background

The significant extension of late-life expectancy since the late 20th century has delayed the age of dying in contemporary society (Tosato, Zamboni, Ferrini, & Cesari, 2007). This has also increased the role played by medical interventions in extending and shaping older people's dying, highlighting different aspects of the dying experience in later life, such as the degree of individual awareness, autonomy and choice (to preserve personal dignity and to control pain and fear; Lloyd, 2013), and the related medicalizing practices (which can prolong or hasten the dying process; Murray, Kendall, Boyd, & Sheick, 2005).

Avoiding a prolonged and painful death (particularly in case of older patients, who often suffer from chronic diseases combined with cognitive and physical degeneration) provides a rationale for euthanasia or physician-assisted death. In Europe, this type of care has been legalized in very few countries, as well it is mostly debated in others, covering different arguments in favor or against allowing the use of

medical assistance to end one's life with dignity, according to patients' own wishes, in cases of terminally ill or greatly suffering individuals (van der Heide et al., 2003).

Verbakel and Jaspers (2010) mentioned several likely explanations for the different levels of permissiveness toward euthanasia among adult population. On one hand, the *religious hypothesis* (i.e., the presence of religious beliefs and practices) and the *slippery slope hypothesis* (i.e., concerns about involuntary euthanasia practices and potential abuses feared by vulnerable groups, such as older, sick, or disabled people) are considered predictive of opposition to euthanasia. On the other hand, among the explanations for a positive attitude toward euthanasia, the authors mentioned the *autonomy hypothesis* (i.e., higher self-recognition and an individual's right to self-determination, often associated with

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higher education) and the *death with dignity hypothesis* (particularly espoused by people who have experienced caring for suffering, terminally ill relatives). The heuristic capability of these hypotheses differs significantly when applied to older individuals, both in terms of personal meanings and for structural and cultural reasons.

However, the attitudes of older people toward euthanasia remain largely unexplored. Indeed, other than a 1993 study by Leinbach, only recently has research focused on the perceptions of older people toward end-of-life issues (Buiting et al., 2012; Malpas, Wilson, Rae, & Johnson, 2014; Roesinger et al., 2016).

The purpose of this contribution is to provide research findings on this topic among older age groups, observing the individual and structural factors behind the positive or negative attitudes of older people toward active voluntary euthanasia (AVE) by analyzing results of an assisted interview survey among a community-dwelling older population living in Genoa, Italy.

Our hypothesis is that intergenerational differences between younger-old and older-old cohorts could play a key role as predictive factors of different attitudes of older people toward AVE. Such a rationale can be motivated also considering the cultural differences in attitudes between the liberal, educated younger-old, corresponding to the first cohort of the "baby boomers," born between 1945 and 1954, and the older-old cohort of the "silent generation," born before World War II and typically characterized by a traditionalist value system (Green, 2006).

Our contribution and its main hypothesis are also motivated by the research context. Indeed, there is an ongoing heated public debate in Italy about the actual prohibition of euthanasia, and greater tolerance for euthanasia has diffused among older people in the last decades. Analyzing the European Values Survey (EVS) datasets, in Italy the average rate of those over the age of 65 considering euthanasia "never justifiable" dropped from 65.9% in the 1981-1984 waves to 42.9% in the 2005-2010 waves (*Source.* Our analysis of the 1981-2010 EVS datasets; see Section I in the appendix).

Furthermore, Genoa exemplifies an international case of demographic aging, with one of the highest aging indexes in Europe, in 2013 equal to 235.9 residents over the age of 65 for every 100 residents under 15 years old versus the Italian mean value of 152.7 and the EU28 mean value of 117.7 (*Source.* Our analysis of Eurostat datasets). Such a proportion of older residents significantly affects local mortality rates: In 2015, 91.0% of all deaths in Genoa occurred among those over the age of 65 versus 87.9% in Italy and 82.0% in EU28 (*Source.* Our analysis of Eurostat datasets).[1]

Method

Study Design and Target Population

We conducted a cross-sectional assisted interview survey adopting a territorial design, focusing on older people from three areas of the town who were chosen to reflect the variety of neighborhoods' socioeconomic status. According to the criteria used in previous studies (Palumbo, Poli, & Torrigiani, 2007) and following the classic Centers's (1949) socioeconomic classification of urban areas, we selected three districts describing a peripheral working-class metropolitan zone (the Val Polcevera), a central middle-class borough (the Bassa Val Bisagno), and an upper-level city-center district (the Medio Levante). Overall, the older people residing in the three zones represented 32.3% of all 160,784 residents over the age of 65 living in Genoa in 2013 (Comune di Genova, 2013). We used as a sampling list the civil registry datasets of the three districts provided by the local municipality. The extraction of cases followed a factor sampling plan based on gender and age class (maintaining as much as possible an equal proportion between the two genders and the two age classes of 65 to 74 years and 75 to 84 years; see Section II in the appendix). We limited the target population to people ranging in age from 65 to 84 years (foreseeing to sample on a theoretical population of 38,986 residents aged 65-84 years old in the three districts) to reduce the potential response decrease among very old respondents. At least three equivalent reserve units were predicted for each case in the first random extraction. A specific areal procedure was followed, mapping each district at the census-section level and considering the specific socioeconomic and sociodemographic characteristics of older residents living in each section (examining average income, incidence of residents over 65 years and percentage of people over 65 years living alone). The random extraction of cases was performed to adequately assess the different living environments of the older people being surveyed. To obtain this sample, it was necessary to contact approximately 7,000 individuals (out of the theoretical population of 38,986 residents aged 65-84 years old in the three districts) via recruitment notices, mail, and phone calls. Finally, we collected a sample of 1,782 cases (see the "Results" section for details).

Variables

To operationalize the main dependent variable, that is, personal attitudes toward AVE, we adopted the abstract problem formulation used by Stronegger, Burkert, Grossschädl, and Freidl (2013), by referring precisely to AVE and asking, "Do you agree or disagree with a physician intentionally terminating the life of an incurably sick and suffering person, fulfilling her or his expressed wish to die?" We excluded a situational formulation, that is, using vignettes or referring to detailed case examples, because we found major misleading bias during the pretest phase. Conscious of the impossibility of dealing adequately with all likely forms of assisted dying (AD), we intentionally focused only on AVE, avoiding inquiries about any other types (for instance, assisted suicide, which defines different active roles, as well as different ethical and legal implications from AVE). This was done to

facilitate concentrating on only one clearly defined possible phenotype. We adopted the following answer categories: "always unjustifiable," "it depends on specific cases and situations," "always justifiable," "undecided," and "don't know." After a preliminary descriptive analysis, "undecided," "don't know," and missing cases resulted in a limited amount (only 0.6%) and were excluded from the analysis. Thus, bivariate analyses of attitudes toward AVE were based on the three recoded categories of "complete rejection," "conditional tolerance," and "full approval." Instead, the binary logistic regression model was based on two recoded categories of "rejection" and "tolerance/approval" by considering the "tolerant" answer categories as a conditional agreement (not indicating a definite rejection) that could be reasonably merged with "acceptance" (similar recodification was adopted in previous studies; see Moulton, Hill, & Burdette, 2006; Stronegger et al., 2013). Moreover, having tested the homogeneity of the respondents expressing "tolerance" and "approval" toward AVE, the results confirmed the acceptability of grouping the two categories (see Section III in the appendix).

Several independent variables were chosen to explore their association with attitudes toward AVE. In the sociodemographic domain, we considered age, gender, marital status, and cohabitation. Age was considered in chronological terms, dividing the sample into two subgroups of younger-old (65-74 years) and older-old respondents (over 75 years). Gender was considered in evaluations of any differences. Household conditions were considered by collecting marital status, the number of people in the household, and the type of cohabitation, recoded according to the classic typology proposed by Laslett in 1972 (solitary, nuclear, extended, multiple, and nonstructured), to ascertain the extent of caregiving networks and social isolation levels.

Having examined different age groups of older people, health conditions were carefully considered. The degree of disability was evaluated by observing basic independence in the Activities of Daily Living (ADL, Katz, 1983) scale and by assessing functional independence through the Instrumental Activities of Daily Living (IADL, Lawton & Brody, 1969) scale. All respondents reporting any eventual difficulty or inability to perform ADL or IADL tasks were assigned a score of "1," indicating the presence of ADL or IADL impairments ("0" score for all other respondents without an ADL or IADL deficit). Self-rated health was determined using the standard formulation adopted in the EVS and then was recoded as "very poor," "poor," "fair," or "good" perceived health. In addition, two items regarding having had a passive or active care experience were included in the survey questionnaire, asking whether the respondents had provided assistance to someone suffering a serious illness or had themselves received assistance for a serious illness at home or in a hospital.

Several factors, potentially explaining the differences between older-old (over 75 years) and younger-old (65-74 years) respondents, were evaluated. More specifically, we took into account the level of education, the economic conditions, the cultural orientations, and the religious practice. All of these were considered as potentially predictive factors of differences in the attitude toward AVE between the two age groups.

Level of education was described using four categories: "compulsory school," "apprenticeship or intermediate vocational degree," "high school diploma," and "university degree/PhD." The economic income of the individual and the household disposable income (Poli et al., 2016) were evaluated using the following: (a) the respondent's income and the earnings provided by the rest of the family (including pensions, disability allowances, real estate rentals and investments, salary, and economic aid from other family members, institutions, or charities), (b) the proportion of the total family income represented by the respondent's income, and (c) their declared ability to support overall routine expenses. Three different levels of economic conditions were successively recoded as "lower," "average," and "higher."

The level of satisfaction with daily relationships was measured in terms of the quality and frequency of everyday social interactions experienced by the respondents, including contact with family members (both next-of-kin and distant relatives), friends, acquaintances, previous (or actual, if still employed) work colleagues, neighbors, and (if present) relations with nurses and other caregivers (Poli, 2014). Three different levels of satisfaction with relationships were successively recoded as "lower," "average," and "higher."

Sociocultural ideology was measured using the scale proposed by Cesareo (2007), which explored different attitudes toward perceived deviance in monetary, addictive, civic, and sexual behaviors. This scale was conceived for a contemporary Italian social context and, when examined using a cluster analysis, it provides three clusters, indicating three different sociocultural profiles (Palumbo & Poli, 2007): conservatism (conventional and anchored in old-fashioned ritualism), liquid neo-conformism (ambivalent and dis-embedded, swinging between unconventional and conformist behaviors), and bourgeois liberalism (prevalently open-minded and progressive). In addition, individuals' value systems were evaluated using the scale traditional versus secular-rational values index adopted in the World Values Survey by Inglehart and Welzel (2005). Higher levels of traditionalism described old-style values, such as religion, importance of parent–child ties, deference to authority, absolute standards, and the preservation of the traditional family. In contrast, lower traditionalism levels reflected a secular-rational orientation with opposite preferences. Finally, the level of religious services attendance was asked and recoded as "null," "occasional," or "regular."

Statistical Methods

Associations with attitudes toward AVE were first explored using bivariate analysis, verifying the significance of *p* values using Pearson's chi-square. Successively, a binary logistic

regression model was used to test the association between the complete refusal of AVE and all the independent variables mentioned above. The likelihood ratio test was used to assess the statistical significance of each parameter in the model. Pearson's product–moment correlation coefficient or Spearman's rank correlation coefficient was calculated to estimate the correlations between parameters. We checked for multicollinearity, which revealed that the factors were independent and not excessively correlated with each other, for the most part. We adopted a stepwise backward-selection method (likelihood ratio test <0.2). Two-tailed probabilities were reported, and a *p* value of .05 was used to define nominal statistical significance. All analyses were conducted using SPSS (Version 23, SPSS, Inc., Chicago, IL, USA).

Results

Sample and Response Rate

We obtained a final sample of 1,782 cases, reflecting a confidence interval [CI] of 2.5% and a confidence level of 95%, representative by gender and age class, according to a theoretical population of 38,984 residents in the three districts aged between 65 and 84 years. Overall, we achieved a response rate of 25% (out of the about 7,000 contacted individuals). We utterly reduced the sample to 1,771 cases, excluding 11 cases (0.6% of the overall sample) of "no answer" or "undecided" respondents on the main dependent variable (attitude toward AVE).

Statistical Analysis

The results of the bivariate and binary logistic regression analyses are provided in Tables 1 and 2, respectively. Overall, 39.9% of our sample disagreed with AVE, 26.7% expressed conditional tolerance, and 35.2% agreed completely (Table 1).

The differences in age group, in health conditions, and in cultural and educational levels resulted as diversely associated with positive or negative attitude toward AVE.

Statistical significance was reached in the comparison of age groups. The complete refusal of AVE, declared by only one third (33.7%) of the respondents in the age range of 65 to 74 years, increased meaningfully to nearly half (46.3%) of the older-old respondents. On the contrary, full approval rates toward AVE were significantly higher among those aged 65 to 74 (39.0%) than among those over 75 years of age (31.4%).

When considering health conditions, 48.5% of the respondents with ADL impairments and 45.0% of those with IADL impairments completely disagreed with AVE. Among the healthier respondents, full approval toward AVE was expressed by 38.0% of those without basic deficits and by 38.4% of those without functional impairment. Similarly, an inverse relationship emerged between self-rated health and complete rejection of AVE (with increased

rejection of AVE correlated with lower quality of perceived health conditions). Passive and active care experiences confirmed the above trend. Complete refusal of AVE increased among respondents who declared they had received care for serious illnesses at home or in the hospital (45.0%), while complete approval for AVE reached 38.3% among respondents reporting experiences with actively caring for seriously ill persons.

When comparing marital status, higher rates of complete refusal toward AVE were expressed by respondents who were single (48.7%) and divorced, separated or widowed (43.3%). In contrast, the approval rates were higher among married or cohabiting respondents (37.0%).

The rate of complete refusal of AVE was higher among respondents with lower educational levels (reaching 43.0% for individuals at the compulsory school level), while full approval increased among those with higher levels of education.

Attitudes toward AVE were inversely associated with satisfaction with daily social relationships. Among respondents reporting lower satisfaction, the rate of complete refusal toward AVE reached 43.8%, while the rate of full acceptance was 40.1% among those declaring higher satisfaction.

When analyzing sociocultural ideology, conservative profiles confirmed a marked disagreement with AVE (61.2% of full rejection), while full approval increased to 43.8% among those with liquid neo-conformist orientations and 51.7% among those with liberal attitudes. Similarly, the full refusal rate of AVE increased among those with higher levels of traditionalism (46.7%) and regular attendees of religious services (57.2%).

Correlations of AVE Rejection with the aforesaid significant factors are provided in Section IV and confirm the previous results.

The binary logistic regression (limited to the variables showing adequate statistical significance; see Table 2), adjusted for age and gender, explained 21.7% of the euthanasia rejection model.

The significant odds ratio (OR) for individuals over the age of 75 confirmed an increasing relationship between AVE full rejection and aging (OR = 1.13, 95% CI = [1.01, 1.26]). Similarly, the presence of ADL impairment and experiences of receiving assistance for serious illness (both factors implicitly related to the aging process) were positively related with AVE full rejection (OR = 1.36, 95% CI = [1.06, 1.76] and OR = 1.29, 95% CI = [1.03, 1.62], respectively).

Full refusal of AVE was confirmed to be inversely related to higher education and was most strongly associated with compulsory school level (OR = 0.60 for apprentice training/vocational degree, OR = 0.77 for high school diploma, and OR = 0.75 for university degree level vs. compulsory school education).

Higher satisfaction with relationships described a decrease in AVE full refusal (OR = 0.68, 95% CI = [0.51, 0.90] vs. lower level of satisfaction).

Table 1. Respondents' Characteristics by Attitudes Toward AVE (*N* = 1,771).

		Euthanasia (AVE)			
	Cases	% complete rejection	% conditioned tolerance	% full approval	χ^2 test *p* value
Total sample	1.771	39.9	26.7	35.2	—
Gender					
Male	854	37.2	26.0	36.8	.084
Female	917	42.4	23.8	33.8	
Age groups					
65-74	901	33.7	27.3	39.0	.000
75 and above	870	46.3	22.3	31.4	
Presence of ADL deficits					
Yes	534	48.5	22.7	28.8	.000
No	1.237	36.2	25.8	38.0	
Presence of IADL deficits					
Yes	725	45.0	24.7	30.3	.000
No	1.046	36.4	25.0	38.6	
Self-rated health					
Very poor–poor	148	50.7	23.6	25.7	.007
Fair	903	41.2	24.8	34.0	
Good	720	36.1	25.1	38.8	
Marital status					
Single	115	48.7	20.9	30.4	.019
Married/cohabiting	1,044	37.0	26.9	36.1	
Divorced/separated/widowed	612	43.3	22.1	34.6	
Number of persons in household					
Living alone	548	43.1	21.7	35.2	.229
Two persons	927	38.3	26.8	35.0	
Three or more persons	296	39.2	24.7	36.1	
Household classification					
Solitaries	566	42.8	22.3	35.0	.253
Nuclear	1.096	38.0	26.5	35.6	
Extended	44	43.2	18.2	38.6	
Multiple	22	45.5	13.6	40.9	
No structure	43	46.5	30.2	23.3	
Education					
Compulsory school	1.150	43.0	24.6	32.4	.008
Apprentice training/vocational degree	103	29.1	30.1	40.8	
High school diploma	356	34.8	23.9	41.3	
University degree/PhD	162	36.4	25.3	38.3	
Economic condition					
Lower	538	41.1	21.7	37.2	.662
Average	947	39.8	25.6	34.6	
Good	286	38.1	28.3	33.6	
Assisted for serious illness					
Yes	662	45.0	25.2	29.8	.001
No	1.109	36.9	24.6	38.5	
Care for seriously and suffering ill					
Yes	517	35.6	26.1	38.3	.054
No	1.254	41.7	24.3	34.0	
Satisfaction for relationship					
Lower	498	43.8	27.1	29.1	.001
Average	774	41.4	22.6	36.0	
Higher	499	33.9	26.1	40.1	
Sociocultural ideology					
Conservative	660	61.2	23.6	15.2	.000
Liquid neo-conformist	633	30.0	26.2	43.8	
Liberal bourgeois	478	23.6	24.7	51.7	
Traditionalism level					
Lower	1,462	38.4	25.8	35.8	.005
Average	219	47.5	23.7	28.8	
Higher	90	46.7	12.2	41.1	
Religious attendance					
Null	439	30.1	25.3	44.6	.000
Occasional	1.028	39.0	26.8	34.2	
Regular	304	57.2	17.8	25.0	

Note. AVE = active voluntary euthanasia; ADL = activities of daily living; IADL = instrumental activities of daily living.

Table 2. Binary Logistic Regression Analyses (Stepwise Backward) Results of Rejection of AVE by Independent Variables (N = 1,771).

	Rejection of AVE		
Independent variables	p value[a]	OR[b]	95% CI
Gender (reference = female)			
Male	.111	0.91	[0.82, 1.02]
Age (reference = age class 65-74)			
Age class 75+	.032	1.13	[1.01, 1.26]
Presence of ADL impairment (reference = no)			
Yes	.015	1.36	[1.06, 1.76]
Received assistance for serious illness (reference = no)			
Yes	.026	1.29	[1.03, 1.62]
Education (reference = compulsory school)	.055		
Apprentice training/vocational degree	.036	0.60	[0.37, 0.96]
High school diploma	.068	0.77	[0.58, 1.02]
University degree/PhD	.161	0.75	[0.51, 1.11]
Satisfaction for relationships: (reference = low)	.003		
Average	.658	1.05	[0.82, 1.36]
High	.009	0.68	[0.51, 0.90]
Sociocultural ideology (reference = conservative)	.000		
Liquid neo-conformist	.000	0.28	[0.22, 0.36]
Liberal bourgeois	.000	0.19	[0.14, 0.25]
Traditionalism level (reference = higher)	.007		
Average	.748	0.91	[0.53, 1.56]
Lower	.034	0.60	[0.37, 0.96]
Religious attendance (reference = null)	.000		
Occasional	.008	1.42	[1.09, 1.84]
Regular	.000	3.05	[2.17, 4.30]
Constant	.008	0.73	
Nagelkerke R^2	21.7%		

Note. AVE = active voluntary euthanasia; OR = odds ratio; CI = confidence interval; ADL = activities of daily living.
[a]Two-sided Wald test.
[b]OR > 1 indicates a higher association to rejection of AVE.

Compared with more conservative positions, more progressive ideological orientations were correlated with a decline in AVE full refusal (OR = 0.28 for the liquid neo-conformist profile and OR = 0.19 for the liberal-bourgeois profile vs. the conservative profile). Moreover, lower levels of traditionalism were associated with decreasing ORs for AVE full refusal (OR = 0.60, 95% CI = [0.37, 0.96] vs. higher traditionalism levels). Confirming the above attitude patterns and behavioral practices, regular religious attendance was associated with increasing ORs for AVE full refusal (OR = 3.05, 95% CI = [2.17, 4.30] vs. null religious attendance).

Discussion

Our results provide evidence of negative attitude toward AVE among the very old and more vulnerable respondents (as emerged in other studies; see Appelbaum, 2016; Buiting et al., 2012; Malpas et al., 2014; Rietjens, Deschepper, & Pasman, 2012). This is confirmed by the significant association of dislike toward AVE with older age and worst health conditions.

As well, our findings provide also evidence for the spread of an increasingly positive attitude toward physician-assisted dying, particularly among the more educated and culturally open-minded younger-old generation (as confirmed by the significant association of acceptability of AVE with the 65 to 74 age group, higher educational levels, and more progressive cultural attitudes). Such major openness among older subjects still in good overall conditions was observed also in other studies (see Malpas, Mitchell, & Johnson, 2012; Roesinger et al., 2016; van Wijngaarden, Leget, & Goossensen, 2015).

The significant associations of the positive or negative orientations toward AVE with the age of respondents, their cultural system and related practices, as well as with their overall health conditions seem to confirm our starting hypothesis of considering the intergenerational differences between the two age groups as predictive factors of the diverse attitudes toward AVE.

Indeed, despite less recent studies describing age as nonpredictive of opposition to euthanasia when aging (for instance, see Leinbach, 1993), the real *fil rouge* in the interpretation of our results seems to be age and related cultural profiles.

On one hand, as confirmed by resulted association of a negative attitude toward AVE with higher traditionalism and with lower education, the stronger opposition toward AVE among the older-old respondents resembles the prevalent traditionalist-conservative ideology of the "silent generation," born in 1945 and earlier (Howe & Strauss, 1991). This generation, on average less educated and raised during the difficult times of World War II, also exhibits in later life withdrawn and observant characteristics, recognizing one's own role in society as less autonomous, more hierarchically organized, and prescriptively directed along rigid structural values (Hanse & Leuty, 2012). However, such cultural explanations must also be integrated with the physical decline of the older-old respondents, who are typically affected by the worst health conditions and often suffer disability impairments, therefore potentially fearing involuntary euthanasia and abuses if physician-assisted dying were legalized (Appelbaum, 2016; Buiting et al., 2012; Malpas et al., 2014; Rietjens et al., 2012; Shariff, 2012).

On the other hand, a higher incidence of full approval for AVE emerged among the respondents in the 65 to 74 age class, who belong to the baby boomer generation (Dychtwald & Flower, 1990). Being generally better educated, still living as a couple, in good health, socially integrated and with adequate economic conditions, this profile may show greater open-mindedness due to more secularized and individualist attitudes. Confirmed by the resulted association of a positive attitude toward AVE with higher education levels and culturally progressive orientations, the finding of relatively strong AVE approval reflects the typical liberal orientations and behaviors of baby boomers, having experienced the progressive counterculture of the 1960s in youth and socially diffused individualism in adult life (Green, 2006). Consequently, in later stages of life, such attitudes may express a professed entitlement for even a personalized death, claiming autonomy and dignity until the end (Gilman, Merrill, & Reid, 1997; Lloyd, 2004; Scherer & Simon, 1999; Wasserman, Clair, & Ritchey, 2005). Still, the more strongly positive attitude toward euthanasia expressed by this profile may be motivated not only by their desire for a self-determined death but also by concerns regarding pain and fear in dying (Buiting et al., 2012; Roesinger et al., 2016; Verbakel & Jaspers, 2010) or regarding the risk of becoming a burden to their partner and relatives in case of a prolonged, incurable, and degenerative illness (as confirmed by the growing approval toward AVE among married or cohabiting respondents; see also Malpas et al., 2012). Moreover, approval toward AVE resulted increasing with higher levels of satisfaction for daily relationships, resembling the socially more integrated baby boomer's profile instead of the loneliness and isolation typically suffered by very old respondents.

We emphasize that our survey captured general attitudes, not "close to death" experiences, stimulating reflection in the respondents about a somewhat "remote" argument. Our interpretation is that the current, specific health conditions of the respondents and the perceived degree of remoteness of the death event could play a key role in their responses. In this sense, although the oldest individuals are potentially nearer to death, the baby boomers could feel that death is still distant thanks to increased life expectancy. Such different life-course perspectives could explain the differing attitudes among the respondents of the two age groups, both behind the acceptance of AVE prevalently expressed by baby boomers and behind the rejection prevalently expressed by the older respondents (who are generally in the worst health conditions). Nevertheless, these remain unconfirmed hypotheses because, as this is a cross-sectional study, we cannot confirm whether those baby boomers, currently in good health and approving AVE, would express such an attitude when they approach the end of their life.

Finally, a key contextual element supporting the interpretation of the results is the change in religiosity that occurred in Italy in recent decades. Our findings confirm higher levels of religious attendance as a typical predictive factor for opposition to euthanasia, particularly for the older-old respondents (Moulton et al., 2006; Verbakel & Jaspers, 2010). Nevertheless, intergenerational differences can be explained by the secularization process that began in Italy in the 1970s (Martinelli & Chiesi, 2002). This process realized a progressive religious debunking of daily life, privatizing religious beliefs, which were increasingly disengaged from ecclesiastic formalities, and shaping a civil sense of religion that sets spirituality beyond religion itself (De Vita, Berti, & Nasi, 2005). This phenomenon also entailed consequences for the identities of older people, especially the more educated baby boomers, promoting a diffused replanning of consciousness and major autonomy in identity processes, awareness, and choice that could also explain the diffusion of positive attitudes toward end-of-life issues.

Some strengths and limitations of this study should be noted. Compared with the existing literature, which largely focuses on attitudes toward euthanasia among the overall adult population, this contribution provides a representative picture of a large sample over the age of 65 years, enabling an interesting comparison of end-of-life attitudes between age groups of older people, who differ by health conditions, socioeconomic status, and cultural perspectives. Furthermore, the topic is explored among older people in Italy, aiming to fill the void derived from the scarcity of research on such theme among this age group and, particularly, in South European countries.

However, several limitations should be recognized: (a) We focused only on AVE, intentionally ignoring other forms of AD to reduce complexity and avoid confusion in understanding by respondents; (b) we adopted a cross-sectional design, limiting the longitudinal analysis of attitudes toward AVE (thereby impeding the verification of whether younger-old

respondents, actually in overall good health and favoring AVE, would change their opinions with aging); and (c) we encountered a low response rate, mainly because of the partial efficiency of our first contact via mail and the limited availability of potential respondents to be surveyed face-to-face for 30 min at their home or at the university (for lower response rates observed in recent studies, see Roesinger et al., 2016).

Conclusion

Our findings show that differences in age, health conditions, and culturally related behaviors and values between the baby boomers and the very old profiles are predictive of the, respectively, positive or negative attitudes toward AVE between the two age groups. This underlines the relevance of cultural differences for attitudes toward end-of-life issues deriving also from the different intergenerational perspectives characterizing the two cohorts. The results both suggest important implications for medical assistance in dying, particularly when dealing with vulnerable groups, and stress the importance of additional research aimed at exploring the increasingly different perceptions of end-of-life issues among older people. Our study offers significant suggestions for policy makers in Italy, considering both the slow legislative process on the bill on living wills and the urgent need to recalibrate institutional care to end-of-life

situations to ensure adequate and effective palliative care, pain therapies, and extended social support for dying patients and their families.

Appendix

Section I: The Evolution of Attitude Toward Euthanasia Among Over-65 Respondents in Several Waves of the European Values Survey

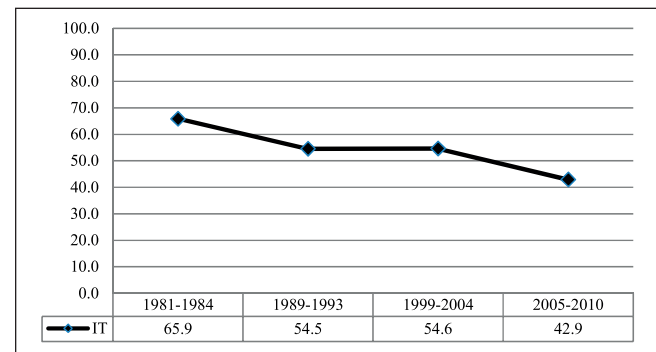|	1981-1984	1989-1993	1999-2004	2005-2010
IT	65.9	54.5	54.6	42.9

Figure A1. Average percentage of answers "Euthanasia is never justifiable" among over-65 respondents in Italy, EVS surveys, 1981-2010.
Source. Our elaborations on EVS survey, 1981-2010.
Note. EVS = European Values Survey.

Section II: Comparison Between the Theoretical Population and the Final Sample

Table A1. Cross-Tab of Sex and Age for the Theoretical Population (*N*).

	Male			Female			Total		
Areas	65-74	75-84	65-84	65-74	75-84	65-84	65-74	75-84	65-84
Val Polcevera	3,448	2,382	5,830	4,017	3,531	7,548	7,465	5,913	13,378
Bassa Val Bisagno	4,464	3,321	7,785	5,602	5,195	10,797	10,066	8,516	18,582
Medio Levante	1,788	1,201	2,989	2,192	1,845	4,037	3,980	3,046	7,026
Total theoretical population	9,700	6,904	16,604	11,811	10,571	22,382	21,511	17,475	38,986
Genova	34,801	24,676	59,477	42,422	37,222	79,644	77,223	61,898	139,121

Source. Our elaborations on data provided by Comune di Genova (2013).

Table A2. Cross-Tab of Sex and Age for the Theoretical Population (% Rows).

	Male			Female			Total		
Areas	65-74	75-84	65-84	65-74	75-84	65-84	65-74	75-84	65-84
Val Polcevera	59.1	40.9	100.0	53.2	46.8	100.0	55.8	44.2	100.0
Bassa Val Bisagno	57.3	42.7	100.0	51.9	48.1	100.0	54.2	45.8	100.0
Medio Levante	59.8	40.2	100.0	54.3	45.7	100.0	56.6	43.4	100.0
Total theoretical population	58.4	41,6	100.0	52.8	47.2	100.0	55.2	44.8	100.0
Genova	58.5	41.5	100.0	53.3	46.7	100.0	55.5	44.5	100.0

Source. Our elaborations on data provided by Comune di Genova (2013).

Table A3. Cross-Tab of Sex and Age for the Final Sample (*N*).

	Male			Female			Total		
Areas	65-74	75-84	65-84	65-74	75-84	65-84	65-74	75-84	65-84
Val Polcevera	206	185	391	223	194	417	429	379	808
Bassa Val Bisagno	107	95	202	92	119	211	199	214	413
Medio Levante	141	125	266	134	161	295	275	286	561
Genova	454	405	859	449	474	923	903	879	1782

Table A4. Cross-Tab of Sex and Age for the Final Sample (% Rows).

	Male			Female			Total		
Areas	65-74	75-84	65-84	65-74	75-84	65-84	65-74	75-84	65-84
Val Polcevera	52.7	47.3	100.0	53.5	46.5	100.0	53.1	46.9	100.0
Bassa Val Bisagno	53.0	47.0	100.0	43.6	56.4	100.0	48.2	51.8	100.0
Medio Levante	53.0	47.0	100.0	45.4	54.6	100.0	49.0	51.0	100.0
Genova	52.9	47.1	100.0	48.6	51.4	100.0	50.7	49.3	100.0

Note. According to the factorial design of the sampling procedure, the final sample followed as much as possible a 50%/50% proportion both for the gender and the age class variables.

Section III: Cross-Tabs Used for Testing and Confirming Homogeneity Between Respondents Expressing "Tolerance" and "Approval" Toward Active Voluntary Euthanasia

Table A5. Attitude Toward AVE × Gender Cross-Tabulation (*N* = 1,771).

	Gender		
% within AVE	Male	Female	Total
AVE			
Refusal	45.0%	55.0%	100.0%
Tolerance	50.5%	49.5%	100.0%
Agreement	50.3%	49.7%	100.0%
Total	48.2%	51.8%	100.0%

Note. AVE = active voluntary euthanasia.

Table A6. Attitude toward AVE × age class Cross-Tabulation (*N* = 1,771).

	Age class		
% within AVE	65-74	75+	Total
AVE			
Refusal	43.0%	57.0%	100.0%
Tolerance	55.9%	44.1%	100.0%
Agreement	56.3%	43.8%	100.0%
Total	50.9%	49.1%	100.0%

Note. AVE = active voluntary euthanasia.

Table A7. Attitude Toward AVE × Educational-Level Cross-Tabulation (*N* = 1,771).

	Educational level				
% within AVE	Compulsory school	Apprentice training/intermediate vocational degree	High school diploma	University/PhD	Total
AVE					
Refusal	69.9%	4.2%	17.5%	8.3%	100.0%
Tolerance	64.3%	7.0%	19.3%	9.3%	100.0%
Agreement	59.8%	6.7%	23.6%	9.9%	100.0%
Total	64.9%	5.8%	20.1%	9.1%	100.0%

Note. AVE = active voluntary euthanasia.

Section IV: Correlations of Active Voluntary Euthanasia Rejection With Significant Factors

Table A8. Correlations of AVE Rejection With Significant Factors.

	AVE rejection (0 = *no*, 1 = *yes*)		
Variables	Pearson correlation	Significance (two-tailed)	*N*
Sex (0 = *female*, 1 = *male*)	−0.05	.026	1,771
Age classes (0 = *younger-old*, 1 = *older-old*)	0.13	.000	1,771
Presence of ADL deficit (0 = *no*, 1 = *yes*)	0.12	.000	1,771
Presence of IADL deficit (0 = *no*, 1 = *yes*)	0.09	.000	1,771
Self-rated health (1 = *very poor*, 2 = *poor*, 3 = *fair*, 4 = *good*)	−0.08	.001	1,771
Received assistance for serious illness at home/hospital (0 = *no*, 1 = *yes*)	0.08	.001	1,771
Care of seriously ill (0 = *no*, 1 = *yes*)	−0.06	.017	1,771
Educational level (1 = *compulsory school*, 2 = *apprenticeship or intermediate vocational degree*, 3 = *high school diploma*, 4 = *university degree/PhD*)	−0.07	.004	1,771
Level of satisfaction for relationship (1 = *lower*, 2 = *average*, 3 = *higher*)	−0.08	.001	1,771
Religious attendance (1 = *null*, 2 = *occasional*, 3 = *regular*)	0.17	.000	1,771
Sociocultural ideology (1 = *conservative*, 2 = *liquid neo-conformist*, 3 = *liberal bourgeois*)	−0.32	.000	1,771
Traditionalism level (1 = *lower*, 2 = *average*, 3 = *higher*)	−0.06	.008	1,771

Note. AVE = active voluntary euthanasia; ADL = activities of daily living; IADL = instrumental activities of daily living.

Author's Note

Stefano Poli is the sole contributor and author of the article.

Ethics Statement

This article does not contain any studies with animals. Informed consent was obtained from all respondents included in the survey. This research was approved by the Ethics Committee of Dipartimento di Scienze della Formazione [DISFOR], University of Genoa, in adherence with the Declaration of Helsinki.

Note

1. For the calculation of the aging index, we used data from http://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-data/database. For the mortality of residents over the age of 65, we used data from http://ec.europa.eu/eurostat/web/health/causes-death/data/database.

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