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# Nursing students' attitudes towards death and endof-life care

Atitudes dos estudantes de enfermagem perante a morte e os cuidados em fim de vida

Actitudes de los estudiantes de Enfermería ante la muerte y los cuidados al final de la vida

#### Abstract

**Background:** Personal and clinical experiences influence how nursing students cope with death. **Objective:** To assess nursing students' attitudes towards death and end-of-life care.

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**Methods:** Descriptive study. Data were collected through an online questionnaire. The sample consisted of 158 undergraduate nursing students. Quantitative data were analyzed using IBM SPSS Statistics software. Descriptive statistics and exploratory data analysis were performed through parametric and non-parametric tests.

**Results:** Students tend more to attitudes of neutral acceptance, fear of death, and approach acceptance and less to attitudes of avoidance and escape. Regarding end-of-life care, students who had already completed clinical training showed positive attitudes.

**Conclusion:** Teaching and learning methodologies should be used to allow students to expose their experiences with death and end-of-life care in clinical training.

Keywords: students, nursing; death; nursing care; attitude; attitude to death

#### Resumo

**Enquadramento:** As vivências pessoais e em ensino clínico influenciam o modo como os estudantes de enfermagem lidam com a morte.

**Objetivo:** Avaliar as atitudes dos estudantes de enfermagem perante a morte e os cuidados em fim de vida.

**Metodologia:** Estudo descritivo. Os dados foram recolhidos através de um questionário *online.* Participaram 158 estudantes do curso de licenciatura em Enfermagem. Os dados quantitativos foram analisados com recurso ao programa IBM SPSS Statistics. Foram realizadas análises estatísticas descritivas e exploratórias dos dados através de testes paramétricos e não paramétricos.

**Resultados:** Os estudantes evidenciam maior proximidade com atitudes de neutralidade, medo e aproximação perante a morte e menos proximidade com atitudes de evitamento e escape. Relativamente aos cuidados em fim de vida, os estudantes que já realizaram ensino clínico apresentam atitudes positivas.

**Conclusão:** É importante utilizar metodologias de ensino/aprendizagem que permitam ao estudante expor as suas experiências com a morte e com os cuidados em fim de vida em ensino clínico.

**Palavras-chave:** estudantes de enfermagem; morte; cuidados de enfermagem; atitude; atitude frente a morte

#### Resumen

**Marco contextual:** Las experiencias personales y en la enseñanza clínica influyen en el modo en que los estudiantes de enfermería se enfrentan a la muerte.

**Objetivo:** Evaluar las actitudes de los estudiantes de Enfermería hacia la muerte y los cuidados al final de la vida.

**Metodología:** Estudio descriptivo. Los datos se recogieron mediante un cuestionario en línea. Participaron un total de 158 estudiantes de la licenciatura de Enfermería. Los datos cuantitativos se analizaron con el programa IBM SPSS Statistics. Se realizaron análisis estadísticos descriptivos y exploratorios de los datos mediante pruebas paramétricas y no paramétricas.

**Resultados:** Los estudiantes mostraron una mayor proximidad a las actitudes de neutralidad, miedo y cercanía hacia la muerte, y una menor proximidad a las actitudes de evitación y huida. Con respecto a los cuidados al final de la vida, los estudiantes que ya han realizado la enseñanza clínica tienen actitudes positivas.

**Conclusión:** Es importante utilizar metodologías de enseñanza/aprendizaje que permitan a los estudiantes exponer sus experiencias con la muerte y los cuidados al final de la vida en la enseñanza clínica.

**Palabras clave:** estudiantes de enfermería; muerte; atención de enfermería; actitud; actitud frente a la muerte



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# Introduction

With the increase in average life expectancy and the improvement in healthcare services, nursing students often come into contact with death and end-of-life care for the first time during their clinical training. This particularly stressful time can expose students' weaknesses and vulnerabilities due to their difficulty in managing feelings and emotions, and may even call into question the development of professional skills (Edo-Gual et al., 2017). For Lima et al. (2017), nursing students display anguish, fear, and difficulty coping with death in clinical training. They may feel that they are not prepared to care for people at the end of their lives and confront death, displaying anxiety and fear. Preparing nursing students for this situation can help them provide better end-oflife care. However, the adaptation of the curricula to this reality should take into account the implicit answers or attitudes of Bachelor of Science in Nursing (BSN) students towards death and end-of-life care, given that this area of skill development arouses feelings and emotions that are sometimes difficult to manage (Edo-Gual et al., 2017). Therefore, the main objective of this study is to assess nursing students' attitudes towards death and end-oflife care. Its specific objectives are to determine nursing students' attitudes towards death and end-of-life care; understand whether the frequency of clinical training influences these attitudes; and determine the differences in the attitudes towards end-of-life care between students who have and have not experienced the death of a person during clinical training.

# Background

The final moments of a person's life are now spent at the hospital rather than at home, with 63.5% of deaths occurring in hospitals under the care of health professionals, especially nurses (Instituto Nacional de Estatística, 2017). However, people are not naturally predisposed to care for someone at the end of their life, and the attitudes towards death and end-of-life care are psychological behaviors learned through social and cultural experiences (Frommelt, 1991). Considering that attitudes can be defined as a system of beliefs and knowledge that everyone has acquired or learned throughout their lives, future nurses' attitudes towards death and end-of-life care can have an important influence on the quality of the care they provide (Wang, 2019). Future professionals need to be more prepared to recognize the need and adequacy of end-of-life care. To this end, they should develop skills "in pain assessment and management, respect for cultural values, self-determination, and right to a dignified death" during their BSN to increase the quality of care delivery (Cardoso et al., 2017, p. 55).

Considering death as an inevitable life event, nursing students will have to cope with it at some point, whether the death of a relative or someone close, or in a clinical training context. According to Lima et al. (2017), nursing students feel powerless about the dying process because they consider it a duty to keep the person alive, and death conveys a feeling of fault and failure. In addition to these feelings, students' lack of experience in caring for dying patients and the strategies to cope with death are the reasons for the difficulties in establishing a helping relationship because managing feelings and emotions becomes challenging (Ferguson & Cosby, 2017). However, according to Lima et al. (2017), nursing students report that teachers and nurse tutors have difficulties in addressing this topic in more depth. For this reason, students show discomfort, restlessness, and apprehension when they are approached by the family, revealing difficulties in establishing a therapeutic communication, answering adequately to the questions posed, and coping with the emotions of the dying patient and the family (Ward, 2017).

Edo-Gual et al. (2017) found an association between the students' feelings about death in clinical training and their previous personal or clinical training experiences, reporting that nursing students who have more positive attitudes in other contacts display less fear or anxiety when providing end-of-life care. For nursing students, death and end-of-life care are underexplored topics in the BSN (Cardoso et al., 2017). Oliveira et al. (2016) propose that this theme be taught through pedagogical strategies that include moments of reflection in seminars, creating spaces for active listening and sharing experiences among students. Henoch et al. (2017) propose that this theme be addressed through a theoretical palliative care education component lasting at least 5 weeks. Implementing these pedagogical measures to include these contents in the curricula increases students' knowledge and skills on this topic and reduces anxiety when performing end-of-life care (Henoch et al., 2017).

The literature shows that the following measurement instruments were used in studies addressing this theme: the Escala de Atitudes Face aos Cuidados à Pessoa em Fim de Vida (EAPAM) - the Portuguese version of the Death Attitude Profile-Revised (DAP-R) - and the Escala de Atitudes face aos Cuidados ao Doente em Fim de Vida - the Portuguese version of the Frommelt Attitudes Toward Care of the Dying (FATCOD) Scale. The EAPAM assesses attitudes towards death (Wong et al., 1994; Loureiro, 2010), namely fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance (Wong et al., 1994).

According to Iranmanesh et al. (2008), it is possible to demonstrate, through these measurement instruments, that students who have less positive attitudes towards end-of-life care have lower scores in the item related to fear of death. For these same authors, nursing students who see death as an escape to suffering have less positive attitudes in caring for dying patients and their families, while students who have higher levels of fear of death and acceptance have more positive attitudes toward end-oflife care. However, students with previous experiences of death, whether of someone close to them or in a clinical context, show less positive attitudes towards end-of-life care (Iranmanesh et al., 2008).

FATCOD assesses students' attitudes towards end-of-life care (Frommelt, 1991; Iranmanesh et al., 2008). According



to Iranmanesh et al. (2008), based on FATCOD items, students who received previous training on end-of-life care showed more positive attitudes than students who did not have access to training. According to Edo-Gual et al. (2017), students having received theoretical classes on palliative care and end-of-life care obtain higher scores in the items of this instrument, which reflect more positive attitudes, than students without training because they are less afraid of death. For this reason, fewer difficulties are felt in performing end-of-life care to patients and their families and managing the feelings experienced (Edo-Gual et al., 2017).

## **Research question**

What are nursing students' attitudes towards death and end-of-life care?

## Methodology

Although this study had a mixed-method descriptive design, it will include the quantitative analysis of the collected data to assess BSN students' attitudes towards death and end-of-life care.

A nonprobability convenience sampling was used. The BSN students of a higher health education institution in central Portugal were invited to participate in the study. Inclusion criteria were as follows: being a BSN student, over 18 years of age, and voluntarily agreeing to fill out the data collection tool sent by email.

The data collection tool was a questionnaire divided into three parts and built using Google Docs. The first part consisted of the sociodemographic characterization (age, gender, and year of study). The second and third parts included EAPAM (Wong et al., 1994; Loureiro, 2010) and FATCOD (Frommelt, 1991; Serra, 2012). These instruments were originally created in English but are already validated for the Portuguese population (Loureiro, 2010; Serra, 2012).

The DAP-R was translated and adapted in 2010 and became the EAPAM in the Portuguese version (Wong et al., 1994; Loureiro, 2010). This instrument allows assessing the profile of students' attitudes towards death. It consists of 32 multidisciplinary items grouped into five dimensions that correspond to different attitudes towards death: fear of death, death avoidance, neutral acceptance, approach acceptance, and escape acceptance. It is rated on a 7-point Likert scale (strongly disagree, moderately disagree, disagree, undecided, agree, moderately agree, strongly agree) and self-completed by the participants (Loureiro, 2010). The total scores of each dimension result from the sum of the scores of each item divided by the total number of items in that dimension. A higher score in a given dimension indicates a higher tendency to identify with that particular dimension. The total score in EAPAM ranges from 32 to 224 points.

The FATCOD Scale was translated and validated for the Portuguese population in 2012, being designated *Escala* de Atitudes face aos Cuidados ao Doente em Fim de Vida (Frommelt, 1991; Serra, 2012). This instrument aims to assess students' attitudes towards end-of-life care. It consists of 30 items rated on a 5-point Likert-type scale (strongly disagree, disagree, uncertain, agree, and strongly agree). Of these 30 items, 15 refer to positive aspects towards caring, and 15 items refer to negative aspects. It should be noted that there is a distinction between items focused on attitudes towards the patient (2/3 of the)scale) and items focused on attitudes towards the family (remaining 1/3 of the scale; Serra, 2012). For data analysis, the items related to negative attitudes were recoded to reverse their score. Higher scores correspond to more positive attitudes towards end-of-life care. The total score of FATCOD ranges from 30 to 150.

The instruments used in this study have different Cronbach's alpha coefficients ( $\alpha$ ). The EAPAM has a value of  $\alpha = 0.65$ , being modest but acceptable (Loureiro, 2010). Despite this value, the instrument has reasonable internal consistency values for each of its dimensions. On the other hand, FATCOD has a coefficient value of  $\alpha = 0.80$ , which is considered good (Serra, 2012; Sousa et al., 2015).

Data were collected between October and December 2019. In the instructions for completing the questionnaire, students who had already completed their clinical training by the time of data collection were asked to complete the entire questionnaire. In contrast, students who had never completed it should stop filling it out after the second part, which corresponded to the EAPAM because they could not answer FATCOD items given their lack of experience in providing end-of-life care.

Permission was obtained from the authors to use the measurement instruments. The ethics committee of the institution participating in the study gave a favorable opinion (Opinion No. 05/2019) to the study and the board of directors approved the implementation of the study in that institution.

The participants were informed about the ethical procedures through the information included in the questionnaire, and the researchers created an email address to clarify doubts. The questionnaires were sent by email and completed in an online form that did not match the collected data with the participants' email. Privacy and confidentiality were ensured during the data collection and analysis period. Data were stored in a password-protected computer file that could only be accessed by the research team. After the study ended, the anonymized database was delivered to the research and development unit where the project is registered for further research. Quantitative data were analyzed using IBM SPSS Statistics, version 21. A descriptive statistical analysis was performed by calculating frequencies, measures of central tendency, and measures of dispersion, depending on the nature of the data. Subsequently, an exploratory data analysis was performed to study the characteristics of the distribution of interval variables in the sample.



# Results

The sample consisted of 158 students, with 134 (84.8%) women. Their mean age was 22.16 years (SD = 5.7), ranging from 18 to 45 years. Regarding the year of study, 43 (27.2%) were in the 1st year, 46 (29.1%) in the 2nd year, 30 (19%) in the 3<sup>rd</sup> year, and 39 (24.7%) in the 4<sup>th</sup> year (Mdn = 2; IQQ = 2). At the time of data collection, 79 students (50%) had attended clinical training. A descriptive data analysis was performed on the 32 items of EAPAM (Table 1) to analyze the attitudes towards death of students attending different course years. The total mean score obtained on the EAPAM scale was 130.75 points, with a standard deviation of 23.32.

### Table 1

#### Descriptive statistics of EAPAM

	Minimum	Maximum	Mean	Standard devi- ation	Variance
Fear EAPAM	1.00	7.00	4.1591	1.38223	1.911
Sum_Fear EAPAM	7.00	49.00	29.1139	9.67561	93.618
Avoidance EAPAM	1.00	7.00	3.6924	1.26464	1.599
Sum_Avoidance EAPAM	5.00	35.00	18.4620	6.32318	39.983
Neutral EAPAM	2.40	7.00	5.4127	.80624	0.650
Sum_Neutral EAPAM	12.00	35.00	27.0633	4.03122	16.251
Approach EAPAM	1.00	6.70	3.7753	1.21946	1.487
Sum_Approach EAPAM	10.00	67.00	37.7532	12.19465	148.709
Escape EAPAM	1.00	6.20	3.6722	1.05353	1.110
Sum_Escape EAPAM	5.00	31.00	18.3608	5.26764	27.748

Note. EAPAM = Escala de Avaliação do Perfil de Atitudes acerca da Morte.

The individual analysis of the 32 items showed that the highest-scoring items (above 5 points on average), which correspond to an attitude of agreement with the item, belonged to the neutral acceptance dimension (items 6, 14, and 24). On the other hand, the lowest-scoring items, with an average of 1 to 4 points, which correspond to an attitude of disagreement, belonged to the dimensions of fear (items 18 and 20), escape (items 5, 9, and 29), and avoidance (items 3, 19, and 26). In this sample, nursing students' profile of attitudes towards death is closer to attitudes of neutral acceptance, fear, and approach than with attitudes of avoidance and escape.

The analysis of the dependent variable "Total EAPAM" according to the independent variable "Did you complete your clinical training?" showed that skewness and kurtosis values are within the limits of acceptability (skewness -0.43 and kurtosis 0.36 in the participants who completed clinical training, and skewness -0.247 and kurtosis 0.284 in the participants who did not complete clinical training), which seems to indicate that this variable follows a normal distribution. This conclusion is confirmed by the results of the normality tests (Kolmogorov-Smirnov, p = 0.036; Shapiro-Wilk, p = 0.066 in the participants who completed clinical training, and Kolmogorov-Smirnov, p = 0.02; Shapiro-Wilk, p = 0.064 in participants who did not complete clinical training) and the tests for homogeneity of variance (Levene's Test, Based on Mean, p = 0.514; Based on Median, p = 0.587; Based on Median and with adjusted df, p= 0.587; Based on trimmed mean, p = 0.542). Therefore, the assumptions of normal distribution in the groups are met, and homogeneity of variance is confirmed. This result made it possible to perform an inferential analysis with parametric tests, namely Pearson's correlation coefficient, to explain the relationship between the independent variable "having completed clinical training" and the dependent variables of EAPAM. The dimensions with a Pearson correlation coefficient closer to 1 were fear (r = 0.241) and avoidance (r = 0.216). The neutral acceptance dimension (r = 0.03) is not associated with the variable because it had values close to 0.

In the dimensions of fear and avoidance, the results show a relationship between having completed clinical training and displaying this attitude, with the significance level being 0.02 for fear and slightly above the significance level (0.06) for avoidance. Regarding the dimensions of neutral acceptance, approach, and escape, the significance level was higher than 0.05, that is, there is no direct relationship between displaying this attitude and having completed clinical training. However, having completed clinical training changes the attitudes towards death with a positive meaning with a significance level of 0.02.

The results of the 79 students who completed clinical training and who answered the measurement instrument were analyzed (Table 2) to determine the attitudes towards caring for dying patients. Measures of descriptive statistics were used to analyze all 30 items of the scale, after being organized into positive (15 items) and negative (15 items) dimensions and the total score.



### Table 2

	Minimum	Maximum	Mean	Standard deviation
Approach FATCOD +	3.00	5.00	4.3284	0.53035
Sum_Approach FATCOD +	27.00	45.00	38.8987	4.78136
Avoidance FATCOD -	1.86	5.00	3.9646	0.64007
Sum_ Avoidance FATCOD -	3.00	35.00	26.4167	7.15779
Discomfort FATCOD	1.89	5.00	3.4158	0.62050
Sum_Discomfort FATCOD	3.00	45.00	28.5412	8.52664
Assertiveness FATCOD +	3.00	5.00	3.9705	0.57643
Sum_Assertiveness FATCOD +	11.00	20.00	15.8354	2.36660

### Descriptive Statistics of Portuguese version of FATCOD

Note. FATCOD = Frommelt Attitudes Toward Care of the Dying.

The total mean score obtained on FATCOD was 109.76 points, with a standard deviation of 31.36 points. The total score of FATCOD can vary up to 150 points, being as high as the more positive attitudes are towards endof-life care (Serra, 2012). The items with the highest mean scores, that is, those with a higher level of agreement from nursing students, were those belonging to positive attitudes, with an average of 63.23 points in the 15 possible items and a mean score of 4.22 points. The individual analysis of each of the 30 items showed that the highest-scoring items (above 4 points on average) were items 4, 13, and 20, which correspond to positive attitudes. Item 13, "Families need emotional support to accept the behavior changes of the dying person", was also a high-scoring item.

However, item 26, "I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying ", which corresponds to a negative attitude, had the lowest mean score (2.76). The same is true for items 29 and 3, "Family members who stay close to a dying person often interfere with the professional's job with the patient" and "I would be uncomfortable talking about impending death with the dying person."

There is a difference between both groups of participants because 63 (79.7% of this sample and 39.9% of the total participants) out of the 79 participants who had already completed clinical training reported that they had had experience with death in their clinical training. Given the asymmetry of the sample of participants who completed clinical training and who had no experience with death during their clinical training (n = 16), the Mann-Whitney test was performed to explore the differences in the attitudes towards end-of-life care among students who had experienced death in their clinical training. Students who had this experience obtained a mean score of 42.44 in the approach dimension, 43.13 in the avoidance dimension, 43.37 in the discomfort dimension, and 42.94 in the assertiveness dimension. Based on the hypothesis test, it was possible to confirm the relationship between having had experience with death in clinical training and attitudes towards end-of-life care. It is not possible to state which variable influences the result because this sample does not follow a normal distribution.

## Discussion

The results obtained with EAPAM and FATCOD show that the nursing students who participated in this study display more attitudes of neutral acceptance, fear of death, and approach acceptance and have a tendency to display positive attitudes towards caring for dying patients. Nursing students in the 1st and 4th year of studies tend to have attitudes of neutral acceptance, seeing death as an integral part of the life cycle. However, they have difficulty finding a personal and objective meaning for their life and death. This perspective suggests that the extent to which each of us fears or accepts death depends on a large scale on how we have learned to accept our life path, giving it a meaning, as was observed by Serra (2012) in a study conducted with nurses. Benedetti et al. (2013) highlight the importance of the scientific, philosophical, and ethical understanding of the death phenomenon and the dying process among nursing students as a strategy to prepare them for the delivery of humanized care to dying patients and their families.

The participants in this study scored lower in the attitudes of avoidance and escape towards death, which constitutes a positive finding and reveals that they do not tend to this type of attitudes that avoid thoughts about death and see death as a way to escape suffering, respectively (Serra, 2012). First-year nursing students tend to have attitudes of avoidance in EAPAM, refusing thoughts about death as a way to reduce the fear and anxiety it generates. They also tend to choose attitudes of escape in the same measurement instrument, seeing death as a way to escape suffering. A possible explanation of these results is that these students, until the date of questionnaire completion, had not yet attended the subject of Bioethics and Ethics in Nursing, which is taught in the first year, and had not



been taught the topic of palliative care, which is addressed in the second year of the program.

Nursing students negatively score items related to communicating with dying patients, showing difficulty in talking about death, educating the patient and family on the topic, and involving family members in care delivery. Given these results, there is a need to invest in training and create spaces for reflection so that students can overcome their difficulties in caring for dying patients (Oliveira et al., 2016).

In FATCOD, nursing students displayed negative attitudes towards family involvement in care delivery, although they agree that "Nursing care for the family should continue after death and during mourning" (item 4), with item 4 being one of the highest-scoring items. Thus, an overall analysis of FATCOD results showed that, although the participants have positive attitudes towards caring for dying patients, they had difficulties coping with the person's feelings, talking about the topic of death, and involving the family in care delivery. For Edo-Gual et al. (2017), although nursing students express a desire to provide humanized care to the dying patients and their families, they find it difficult to cope with death and recognize that they are unable to deal with family members and even their own feelings. According to Sampaio et al. (2015), nursing students have difficulty in establishing good communication but recognize that when individual and dignified care is provided, the family has more positive attitudes towards the death and the dying person. This attitude can be justified by the lack of training and experience, which can negatively affect nursing students' attitudes towards death and end-of-life care. Ferguson and Cosby (2017) believe that nursing students have difficulty in establishing a helping relationship because they do not know how to talk about death and the dying process with the patient and the family.

Major attention is being given to improving the quality of end-of-life care, with an investment on the education and training of future nurses on death and end-of-life care (Cavaye & Watts, 2014), focusing on offering clinical experiences that enable students to develop skills in this field (Gillan et al., 2014). Experiential learning, role-playing, and simulation can also be used because they are effective strategies for developing end-of-life care skills (Kopp & Hanson, 2012). Thus, supervisors and nurse tutors should also feel comfortable and prepared to approach the students and reflect on the topic together (Oliveira et al., 2016). The opportunity to share the experience with others, the guidance of a teacher or a nurse tutor with more experience in this field who can provide emotional and practical support, and the sharing of responsibilities in decision-making about end-of-life care can reduce the fear of inadequacy (Wang, 2019).

One of the limitations of this study is that it only describes the reality of a higher health education institution, so it would be important to conduct it in other institutions to understand which factors can interfere with nursing students' attitudes towards death and end-of-life care. Moreover, the lack of studies conducted in Portugal with nursing students on this topic made it difficult to discuss

the results, which were compared with those of studies conducted in different realities of nursing education.

# Conclusion

The nursing students who participated in the study displayed attitudes of fear and avoidance towards death and approach and positive attitudes towards end-of-life care. The topic of the dying process and death requires a deep reflection to improve students' skills to care for the dying person and reduce negative attitudes towards death and end-of-life care.

This study suggests that having contact with death during clinical training is a meaningful experience that can have a significant pedagogical impact on the development of students' skills.

It is not up to the higher education institution or health institutions to control the clinical circumstances of students' experiences with death or end-of-life care situations. However, when these moments occur, students find themselves in challenging situations when it comes to managing their emotions. However, if students receive adequate preparation and support, it may be possible to minimize negative factors such as feelings of inadequacy, exclusion, or role conflicts, and promote positive outcomes, including coping with and sharing experiences and personal and professional growth. Nursing students need support and opportunities to reflect on and discuss their feelings about caring for the dying person and death. On the other hand, the ethical and emotional aspects of the dying process and death should be highlighted. Students must develop their critical-reflective skills and be able to cope with death in a humanized way throughout their process of becoming autonomous professionals. The assessment of the impact of simulation strategies on students' skills in end-of-life care and communication of bad news can be an area for further research, as well as the assessment of the attitudes of teachers and nurse tutors towards death given that these models can be found throughout students' teaching and learning process.

### Author contributions

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