STROBE Statement—checklist of items that should be included in reports of observational studies

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|  | **Item No.** | **Recommendation** | **Page  No.** | **Relevant text from manuscript** |
| **Title and abstract** | 1 | (*a*) Indicate the study’s design with a commonly used term in the title or the abstract | 1 (line 13) | *Methods: Observational descriptive cross-sectional study* |
| (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 1 (line 9-20) | *Background: The use of complementary therapies in the population is increasing, so it is necessary to understand the training that health professionals receive in this type of therapy in their training plans, as they are often the primary source of information for patients. Our objective was to investigate Spanish universities that offer subjects on complementary therapies in their Nursing degree programs. Methods: Observational descriptive cross-sectional study. For this purpose, we used the document published on the website of the Ministry of Universities as a working document. Additionally, a literature search was conducted up to September 2023 in the PubMed database, along with reverse searches. Results: Out of a total of 62 universities, only 16 (29%) offer a subject related to this type of therapy, with most of them being elective courses. Conclusions: The training content on complementary care in Nursing degree programs in Spanish universities is scarce, highlighting the potential benefit of expanding and promoting it, in line with the recommendations of the World Health Organization.* |
| **Introduction** | | | |  |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 1-2 | *Complementary and Alternative Therapies (CAT) are defined as practices and products of non-mainstream origin, including natural products and mind-body practices, distinct from traditional Western medicine. There is no consensus on the terminology and definitions of these therapies, which can be complementary (used alongside conventional approaches) or alternative (used instead of conventional approaches).*  *The demand for and consumption of CAT has significantly increased in recent decades, with widespread use among patients with various health conditions such as hemodialysis, rheumatology, multiple sclerosis, and cancer. However, there is a gap in the training of professionals in CAT and in the available evidence on their efficacy and safety due to limited research.*  *Despite these limitations, recent studies have shown the efficacy of various CATs, such as music therapy for depression and anxiety, Tai Chi for fall prevention in the elderly, and yoga for cancer-related fatigue. In Spain, the Ministry of Health has highlighted the lack of research and regulation in CAT, leading to the implementation of the Plan for the Protection of Health against Pseudotherapies to evaluate and promote transparency of information and ensure regulatory compliance.*  *The growing use of CAT has significant implications for nursing in terms of patient care and safety. However, knowledge about CAT among nurses remains modest. Despite the support from various organizations, the availability of CAT subjects in university nursing programs is limited. Integrating CAT training into nursing degree programs in Spain could enhance nurses' therapeutic capabilities and reduce the use of pseudotherapies.* |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 3 (line 107-109) | *To assess the status and features of CAT subject offerings in Bachelor's Degree in Nursing 108*  *curricula across Spain for the academic year 2022-2023.*  *There is no hypothesis. Univariate studies typically do not have hypotheses.* |
| **Methods** | | | |  |
| Study design | 4 | Present key elements of study design early in the paper | 3 (line 112) | *Observational descriptive cross-sectional study.* |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 3 (line 115-117) | *All faculties or affiliated centers in Spain, whether publicly or privately owned, that 115*  *offer a Bachelor's Degree in Nursing were included in the study. No sampling was con- 116*  *ducted, and all centers offering this program were included.* |
| Participants | 6 | *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | 3 | *Eligibility Criteria: Population: All faculties or affiliated centers in Spain, whether publicly or privately owned, that offer a Bachelor's Degree in Nursing were included in the study.*  *Inclusion of All Centers: No sampling was conducted; all centers offering this program were included.*  *Sources: Admissions Data: Admissions data for the Nursing degree in Spain were used.*  *University Websites: The website of each university or center was visited to review the current curriculum and subjects offered for the academic year 2022-2023.*  *Methods for Selection of Participants: Website Review: The websites of each included university or center were visited to gather information on the curriculum and subjects offered.*  *Curriculum Assessment: The available curricula on these websites were assessed to identify the presence of subjects related to Complementary and Alternative Therapies (CAT).* |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable |  | *Outcomes: Presence of CAT Subject: Whether or not a CAT subject is included in the nursing curriculum (Yes/No).*  *Details of the CAT Subject: Name of the Subject: The official name of the CAT subject in the curriculum.*  *Nature of the Subject: Whether the subject is compulsory or optional.*  *Duration in Credits: The number of credits assigned to the CAT subject (one credit equivalent to 10 hours of theoretical and practical training).*  *Predictors:*  *Predictors are the independent variables in prognostic studies. Our study is a descriptive univariate analysis. We do not have predictors.*  *Diagnostic Criteria: Not applicable in this context, as the study does not involve diagnosing health conditions or applying diagnostic criteria. The focus is on the assessment of academic curricula and the inclusion of CAT subjects.* |
| Data sources/ measurement | 8\* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | *3* | *To gather data from centers offering the Bachelor's Degree in Nursing and to access their curricula for assessing the availability of CAT subjects, admissions data for the Nursing degree in Spain (Ministerio de Universidades, 2022) were used. Subsequently, the website of each university or center was visited to review the current curriculum and subjects offered for the academic year 2022-2023.* |
| Bias | 9 | Describe any efforts to address potential sources of bias | NA |  |
| Study size | 10 | Explain how the study size was arrived at | NA | *No type of sampling was used since the entire population was selected.* |

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| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why |  |  |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 3 (lines 134-137) | *The descriptive analysis of the quantitative variables involved calculating measures of central tendency and dispersion, while qualitative variables were analyzed using frequencies and percentages.* |
| (*b*) Describe any methods used to examine subgroups and interactions | NA | Not applicable. |
| (*c*) Explain how missing data were addressed |  |  |
| (*d*) *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | NA | *No type of sampling was used since the entire population was selected* |
| (*e*) Describe any sensitivity analyses | NA | *No sensitivity analysis has been performed, only descriptive* |
| **Results** | | | | |
| Participants | 13\* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | 3 (lines 138) | *A total of 62 Spanish universities.* |
| (b) Give reasons for non-participation at each stage | NA | *There were no absences, the entire sample participated* |
| (c) Consider use of a flow diagram | NA |  |
| Descriptive data | 14\* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | 3 - 4 | *A total of 62 Spanish universities offer the Bachelor's Degree in Nursing, com-prising 40 public institutions (64.5%) and 22 private ones (35.5%). Additionally, there are 55 centers where the degree is taught, with 29 being affiliated centers and 26 being institutional ones. Thus, there are a total of 117 centers across Spain offering the Bachelor's Degree in Nursing. Out of 62 universities, 16 (29.0%) offer CAT subjects. Among these, 11 are public (68.8%) and five are private (31.3%). This indicates that 27.5% of public universities and 22.7% of private universities offer such subjects. In terms of centers, 22 out of 117 (18.8%) offer CAT subjects.* |
| (b) Indicate number of participants with missing data for each variable of interest | NA |  |
| (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) |  |  |
| Outcome data | 15\* | *Cohort study*—Report numbers of outcome events or summary measures over time |  |  |
| *Case-control study—*Report numbers in each exposure category, or summary measures of exposure |  |  |
| *Cross-sectional study—*Report numbers of outcome events or summary measures | 4 (lines 152-163) | *In terms of the type of subject offered, CAT subjects are compulsory in two pub-licly owned centers, optional in 19, and one center offers it as a free-choice subject.*  *Regarding the names of the subjects, 16 of them are described as "complementary" (with 12 specifically naming therapies). Additionally, the term "alternative" appears in four subjects, with one of them also including "complementary" in its description.*  *The duration in credits (1 credit equals 10 teaching hours) ranges between 3 and 6 credits for both public and private centers, with a mean of 3.9 and a standard deviation of 1.4 across all centers. For public centers specifically, the mean and standard devia-tion are 3.9 and 1.4, while for private centers, they are 3.8 and 1.5, respectively.*  *Out of the 22 subjects offered, 19 incorporate general content. Two subjects focus on specific therapies (mindfulness and lifestyles, and thermalism), while one is tai-lored for individuals with cancer.* |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | NA | Not applicable. |
| (*b*) Report category boundaries when continuous variables were categorized | NA | Not applicable. |
| (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | NA | Not applicable. |

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| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | NA | *No subgroup or sensitivity analyses have been performed.* |
| **Discussion** | | | | |
| Key results | 18 | Summarise key results with reference to study objectives | 4 (line 165-170) | *Our findings reveal that 29% of Spanish universi- 166*  *ties and 18.8% of centers offering nursing studies include CAT subjects in their nursing 167*  *degree programs* |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | 5 (line 210-214) | *In terms of limitations, it is important to emphasize that the findings of our study are confined to the specific context of Spain. Although we have observed consistency with studies conducted in other countries, the extrapolation of our results to international contexts should be approached with caution, considering cultural and organizational variations among healthcare systems and professional practices.* |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 4 (line 171-179) | *Our findings are consistent with similar studies conducted in various countries. For example, in a study by Fenton and Morris (2003) on the integration of Complementary and Alternative Therapies into nursing school curricula in the United States, 125 out of 585 schools (21%) responded to an online questionnaire. While 97% (121) of the schools offered or planned to offer courses on CAT, only 19 (15%) had compulsory CAT courses, and 46 (36.8%) offered optional subjects. It's worth noting the potential selection bias in the study, as those most motivated by the subject may have been more likely to respond, suggesting that the actual prevalence of CAT subjects across all schools may have been higher than observed in the sample.* |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 4 | *To our knowledge, our study represents the first analysis of the provision of CAT subjects in the nursing degree in Spain.* |
| **Other information** | |  | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | NA | *No financing sources have been used.* |

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.