

Development of a bilingual interdisciplinary scale assessing self-efficacy for participating in Medical Assistance in Dying Développement d'une échelle interdisciplinaire bilingue évaluant l'auto-efficacité à participer à l'aide médicale à mourir

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Abstract

Medical Assistance in Dying (MAiD) is a complex process involving the person seeking care and their relatives. MAiD involves physical, psychosocial and spiritual needs, and consequently the involvement of an interdisciplinary team is beneficial. Therefore, updating the knowledge and skills of healthcare and social services professionals is critical. An interdisciplinary team from Laval University (Quebec, Canada) has developed a continuous training program for all health care and social services professionals who could be involved in the care of persons who request MAiD and their loved ones. It is crucial to assess whether the objectives of the continuous training program are being met, especially since this new training addresses several complex issues (legal, ethical, and clinical). Bandura's self-efficacy theory has been widely used to develop scales for assessing the impact of training programs and identifying knowledge gaps. Bandura's theory states that feeling secure in one's self-efficacy leads to self-determined motivation. Although there are various scales intended to measure self-efficacy in palliative care, none include self-efficacy for participating in the process surrounding MAiD. As a result, we aim to create a bilingual (English-French) interdisciplinary scale to assess self-efficacy for participating in the process surrounding MAiD. The scale will allow decision-makers and researchers to identify current knowledge gaps. It will also be useful for assessing the impact of current and future training programs addressing this end-of-life practice. In this work in progress, we briefly introduce the training program and the future steps in the development and validation of the scale.

Résumé

L'aide médicale à mourir (AMM) est un processus complexe impliquant la personne qui demande le soin et ses proches. L'AMM implique des besoins physiques, psychosociaux et spirituels. Par conséquent, l'implication d'une équipe interdisciplinaire est bénéfique et la mise à niveau des connaissances et des compétences des professionnels est essentielle. Une équipe interdisciplinaire de l'Université Laval (Québec, Canada) a développé un programme de formation continue destiné aux professionnelles de la santé et des services sociaux susceptible d'être impliqués dans les soins et services des personnes qui demandent l'AMM et de leurs proches. Il est crucial d'évaluer si les objectifs du programme de formation continue sont atteints, d'autant plus que cette nouvelle formation aborde plusieurs questions complexes (juridiques, éthiques et cliniques). La théorie du sentiment d'auto-efficacité de Bandura a été largement utilisée pour développer des échelles permettant d'évaluer l'impact des programmes de formation et d'identifier les lacunes en matière de connaissances. Cette théorie stipule que le fait de se sentir sûr de son efficacité personnelle conduit à une motivation intrinsèque à accomplir le comportement visé. Bien qu'il existe plusieurs échelles destinées à mesurer l'auto-efficacité dans le domaine des soins palliatifs, aucune n'inclut l'auto-efficacité pour la participation au processus entourant l'AMM. Par conséquent, nous développons une échelle interdisciplinaire bilingue (anglais-français) pour évaluer l'auto-efficacité à participer au processus entourant l'AMM. L'échelle permettra aux décideuses, décideurs et aux chercheuses et chercheurs d'identifier les lacunes actuelles en matière de connaissances. Elle sera également utile pour évaluer l'impact des programmes de formation actuels et futurs portant sur cette pratique de fin de vie. Dans cet article, nous présentons brièvement le programme de formation et les étapes futures du développement et de la validation de l'échelle.

Introduction

Since 2016, Medical Assistance in Dying (MAiD) has been legal everywhere in Canada. The enactment of MAiD brought to light the needs for updated knowledge and skills among healthcare and social service providers. Indeed, the administration of MAiD is preceded by a longstanding process involving the person and their relatives, all of whom have various needs (physical, psychosocial, spiritual). This process is therefore improved through interdisciplinary collaboration.¹

An interdisciplinary team at Laval University in Quebec, Canada, created a 30-hour continuous training program intended for health care and social service professionals. The content and activities provide a wide range of learning experiences. A case study team project also allows participants from various backgrounds to work together to complete the steps of a fictional, yet realistic, MAiD application process. During the fall semester of 2022, a first interdisciplinary cohort of 21 participants (nurses, physicians, social workers, residents, and psychologists) was trained. The program will be offered in the fall and winter semesters.

Evaluation and continuous improvement of training programs are critical to ensuring quality and participant satisfaction.² Bandura's self-efficacy theory has been widely used to develop scales in order to identify training needs and the effectiveness of training programs.^{3,4} According to Bandura, knowledge and skills are necessary to behave optimally, but insufficient. One must feel self-efficient to transform that knowledge and skills into appropriate courses of action.⁵ Although different scales based on self-efficacy theory exist for palliative care,^{6,7} none include self-efficacy as it pertains to the process surrounding MAiD. Therefore, we aim to develop a bilingual (English-French) interdisciplinary scale assessing self-efficacy for participating in the process surrounding MAiD.

Methods

This study will be conducted at Laval University, a French-speaking university in the Canadian province of Quebec. The study will follow best practices for tool development and validation^{8,9} and be guided by Bandura's scale construction guidelines.

We will deductively define the domains and develop the items using provincial guidelines¹⁰ and the results of a Delphi-study conducted in Ontario, Canada, which identified a set of learning objectives that should be included in any MAiD curriculum.¹¹ We will then carry out content validation in French with the participation of 15 clinical experts and methodological experts using an online questionnaire. The experts will evaluate each item's relevance, clarity, and conceptual adequacy (representativeness) by assigning a score between 1 and 4 using a Likert-type scale. To calculate the content validity index (CVI) for each item, we will assess the proportion of experts who gave it a score of 3 or 4.¹² For an item to be valid, at least 83% of experts will have to have given it a score of 3 or 4.¹³ Items with a lower validity score will be reviewed. Finally, we will use the procedure proposed by the European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Group back to translate the preliminary scale.¹⁴

For all the subsequent phases, the participation of an English-speaking team in addition to our French-speaking team is needed. The subsequent phases will be: 1) a pre-test involving four to six recorded cognitive interviews in each language with individuals from the target population (healthcare and social services professionals); 2) the use of the scale by at least 10 healthcare and social service professionals (in each language) per item in the scale (approximately 30 items), and 3) to assess the psychometric properties of the scale using from the classical test theory.¹⁶

We will first extract descriptive statistics (means, standard deviations, minimum and maximum scores) to judge the variability of item responses and to evaluate possible floor and ceiling effects.¹⁷ We will also assess internal consistency using Cronbach's alpha and the impact of removing each item on this coefficient.¹⁸ To assess the validity of the proposed structure, we will use the comparative fit index, the standardised root-mean-square residual index, and the root-mean-square error of approximation. Ultimately, we will evaluate how consistently participants respond to the scale on a repeated measurement within a short time frame and calculate the intraclass correlation coefficient between the scores.^{9,18}

Summary

We aim to develop the very first bilingual scale assessing self-efficacy of healthcare and social service professionals for participating in the process surrounding MAiD. Our scale could be used to evaluate the impact of current or future training programs, and the need for training program development. We are looking for Canadian English-speaking educational institutions to carry out this bilingual project in collaboration with our French-speaking team.

Conflicts of Interest: None to declare.

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References

1. Brown, J, Goodridge D, Harrison A, Kemp J, Thorpe L, Weiler R. Care considerations in a patient- and family-centered medical Assistance in Dying program. *J. Palliat. Care.* 2022;37,341-351 <https://doi.org/10.1177/0825859720951661>
2. Hill JE, Stephani A-M, Sapple P, Clegg AJ. The effectiveness of continuous quality improvement for developing professional practice and improving health care outcomes: a systematic review. *Implement. Sci.* 2020;15,23 <https://doi.org/10.1186/s13012-020-0975-2>
3. Dehghani F, Barkhordari-Sharifabad M, Sedaghati-Kasbakh M, Fallahzadeh H. Effect of palliative care training on perceived self-efficacy of the nurses. *BMC Palliat. Care* 2020;19,63. <https://doi.org/10.1186/s12904-020-00567-4>
4. Liu L, Zhao Y-Y, Zhang L-H, Chan HY-L. Measuring self-efficacy and readiness for advance care planning in Chinese older adults. *J. Pain Symptom Manage.* 2020;60,622-629. <https://doi.org/10.1016/j.jpainsymman.2020.06.013>
5. Bandura. *Self-efficacy: the exercise of control.* 1997; W. H. Freeman.
6. Phillips J, Salamonson Y, Davidson PM. An instrument to assess nurses' and care assistants' self-efficacy to provide a palliative approach to older people in residential aged care: a validation study. *Int. J. Nurs. Stud.* 2011;48, 1096-1100. <https://doi.org/10.1016/j.ijnurstu.2011.02.015>
7. Desbiens J-F, Fillion L. Development of the palliative care nursing self-competence scale. *J. Hosp. Palliat. Nurs.* 2011;13, 230-241. <https://doi.org/10.1097/NJH.0b013e318213d300>
8. Terwee CB, Prinse CAC, Chiarotto A, et al. COSMIN methodology for evaluating the content validity of patient-reported outcome measures: a Delphi study. *Qual. Life Res.* 2018;27,1159-1170. <https://doi.org/10.1007/s11136-018-1829-0>
9. Boateng GO, Neilands TB, Frongillo EA, Melgar-Quiñonez HR, Young SL. Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Front. Public Health* 2018;6,149. <https://doi.org/10.3389/fpubh.2018.00149>
10. Collège des médecins du Québec et al. Guide d'exercice et lignes directrices pharmacologiques. 2019;226. <https://numerique.banq.qc.ca/patrimoine/details/52327/3438>
11. LeBlanc S, MacDonald S, Martin M, Dalgarno N, Schultz K. Development of learning objectives for a medical assistance in dying curriculum for Family Medicine Residency. *BMC Med. Educ.* 2022;22,167. <https://doi.org/10.1186/s12909-022-03204-1>
12. Zamanzadeh V, Ghahramanian A, Rassouli M, Abbaszadeh A, Alavi-Majd H, Nikanfar A-R. Design and implementation content validity study: development of an instrument for measuring patient-centered communication. *J. Caring Sci.* 2015;4,165-178 <https://doi.org/10.15171/jcs.2015.017>
13. Polit DF, Beck CT, Owen SV. Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Res. Nurs. Health* 30, 459-467 (2007). <https://doi.org/10.1002/nur.20199>
14. Koller M, Aaronson NK, Blazeby J, et al. Translation procedures for standardised quality of life questionnaires: the European Organisation for Research and Treatment of Cancer (EORTC) approach. *Eur. J. Cancer.* 2007;43, 1810-1820. <https://doi.org/10.1016/j.ejca.2007.05.029>
15. Brislin RW. Back-translation for cross-cultural research. *J. Cross. Cult. Psychol.* 1, 1970;185-216. <https://doi.org/10.1177/135910457000100301>
16. Bertrand R, Blais J-GR, Bertrand J-G. *Modèles de mesure : l'apport de la théorie des réponses aux items.* 2004;376, 37-69.
17. Polit DF, Beck CT. *Nursing research: generating and assessing evidence for nursing practice.* 2021. Wolters Kluwer.
18. Devellis RF, Thorpe CT. *Scale development.* 2021. Sage Publications.