

MEETING ABSTRACTS

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# Center for Interdisciplinary Research in Health (CIIS) National Meeting 2023

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The Center for Interdisciplinary Research in Health (CIIS) is the research center of the Universidade Católica Portuguesa (UCP) focused on health care. The Center is organized in five platforms, and distributed in four geographies across Portugal: Lisbon, Porto, Viseu and Sintra (Table 1). The center has currently 155 active researchers and attracted funds exceeding 10M€.

For the first time ever, CIIS has organized a National Event that included researchers from all platforms and disciplines, in a truly interdisciplinary and translational scientific event, counting 117 registered participants and 120 abstracts. The meeting took place at the Faculty of Medicine, in the Sintra campus, on the 31<sup>st</sup> March and 1<sup>st</sup> April 2023. The Scientific Committee of the CIIS National Meeting decided that the theme for the meeting is *Interdisciplinary Health Care*. Rather than clustering researchers by platform or discipline, we decided to create three working sessions that are inclusive to everyone and not restricting the presentations by discipline, being therefore, interdisciplinary. These are: 1 – *Translational Care*; 2 – *Clinical Care*; and 3 – *Community Care*.

The meeting was held in the presence of the Universidade Católica Portuguesa Rector Professor Isabel Capelo Gil, the Vice-Rector Professor Peter Hanenberg, the Director of the CIIS, Professor Marlene Barros, the Director of the Faculty of Medicine, Professor António Almeida and the guest speaker Professor Tomáš Zima, Charles University, Prague, Czech Republic, and hosted by the Deputy Director of the CIIS, Professor Paulo J. G. Bettencourt.

For two days, papers were presented by invited speakers within each session, and posters were presented by CIIS researchers and students, in a highly anticipated poster session. All abstracts were peer-reviewed. To bring further excitement to the poster session, the Meeting Scientific Committee selected the best poster from each platform to receive the Best Poster Award. Finally, the CIIS platform coordinators presented their plans and vision for the future.

Following the success of this meeting, the Scientific Committee of the National Meeting, decided to implement yearly meetings of the Center.

We would like to acknowledge all CIIS members, staff and students that accepted the challenge of participating in this event, presenting their most recent data, sharing their knowledge, and making this truly an interdisciplinary health care event.

We hope this meeting has contributed to share the latest scientific achievements of all members and promoted the beginning of new collaborations for the future, keeping in mind the main goal of improving health care with an interdisciplinary view, to ultimately improve quality of life, with humanity and spirituality at the center of all scientific quests.

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**Table 1 Platforms of the Center for Interdisciplinary Research in Health**

Name	Location	Head
Neurosciences	Lisbon and Porto	Prof. Ana Mineiro
Nursing	Lisbon and Porto	Prof. Paulo Alves
CatólicaMed	Sintra	Prof. Paulo Bettencourt
SalivaTec	Viseu	Prof. Nuno Rosa
Precision Dental Medicine	Viseu	Prof. André Correia



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the Medical Research Council's framework. The development stage included a systematic literature review according to Joanna Briggs Institute guidelines; two focus groups with caregivers and experts; and an online modified e-Delphi. The test phase consisted of a pilot test with ten family caregivers of home-dwelling people with a mental illness accompanied by the community mental health structures of health units in the Lisbon region. The outcomes included spiritual coping, quality of life, and the burden of the family caregiver.

#### Results

A protocol for the intervention was developed and tested with a group of ten family caregivers. A three-session intervention was implemented. The outcomes were assessed pre and post-intervention. Significant changes were observed in the outcomes and the family caregivers mentioned that it was helpful to discuss issues regarding spirituality and religiosity.

#### Conclusion

The intervention "promoting spiritual coping" was developed and tested, considered appropriate for family caregivers of people with mental illness, to be applied in psychotherapeutic context by mental health nurses.

#### P77

##### - Validation of the European Portuguese version of the Brief RCOPE: a methodological study

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#### Background

Being a family caregiver often leads to a burden, with an impact on different dimensions of life. As so, the caregiver develops coping strategies to deal with stressful situations. Coping is a multifactorial and individual process related to responding to stressful situations, such as being a caregiver of a relative with health conditions. There are different coping strategies, such as spiritual/religious coping. The 14-item Brief RCOPE is a widely used instrument to assess spiritual/religious coping, but it is not available in European Portuguese. This instrument is a short version of RCOPE which has 63 items. The aim was to translate, adapt and validate the 14-item Brief RCOPE in Portuguese caregivers of an adult relative with a health condition, such as dementia, mental illness, disabilities, among other physical illnesses.

#### Materials and methods

To examine the psychometric properties of the Brief RCOPE it was used the methodological guideline provided by Sousa and Rojjanasirart.

#### Results

The linguistic and conceptual equivalence of the scale was established. A total of 105 questionnaires were included in this study. The internal consistency was acceptable (Cronbach's  $\alpha = 0.86$ ). The Principal Axis Factor (PAF) analysis with varimax rotation identified two factors made up of 13 items, and one item was excluded from the scale.

#### Conclusion

The European Portuguese version of the Brief RCOPE is a reliable and valid measure for assessing the religious coping of family caregivers of adults with health conditions.

#### P78

##### - Cognitive, emotional, and motivational effects of gamification in the context of learning: A protocol feasibility and usability study

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Gamification is the use of game elements in non-gaming contexts. Empirical studies show that gamification impacts performance, engagement, attention, motivation, and emotions in cognition and learning contexts. However, the literature seems limited by the lack of consistent theoretical support related to gamification; the heterogeneity of results and methodologies; samples without statistical robustness; and the lack of validated questionnaires or non-subjective resources in evaluating individuals. We intend to address these gaps in a future comprehensive randomized control trial (RCT) study. To this end, we carried out a pilot study to assess the feasibility and usability of the RCT. A simple digital course was created and nested (or not) within an e-learning platform, which was adapted to four different versions containing different embedded game elements ("points", "challenge", "medals", and "points + challenge + medals") and one version without embedded game elements. Ten nursing students were recruited to take the course and were asked to watch the course video lessons, do summative exercises, and answer a final assessment. While doing so, we measured affective states with the Self-Assessment Manikin questionnaire, motivation with the Intrinsic Motivation Inventory, the experience with the User Experience Questionnaire and considered an open question to collect ideas for improvements. We also identified the player profiles with the Brainhex Questionnaire. Correct exercises and the final assessment provided engagement and performance scores. Results showed that the protocol is feasible, but there are adjustments to be made to the e-learning platform and its versions. There were technical issues with running it on different operating systems and configurations. It affected the eye tracker and facial recognition software that were plugged in to collect attention and emotion scores. On the other hand, students were interested in experiencing new forms of learning content. Data from this study will be used to develop new web-based versions of the e-learning platform to circumvent the encountered problems, facilitate the implementation, enable the operation, and afford easier user access. This web-based version will also be used to improve the intervention and evaluate the e-learning interface usability, providing insights concerning the acceptability and adaptability of the interface and protocol to refine the research design of the future RCT study. This study received approval from the Comissão de Ética para a Saúde (# 210) and all the students signed an informed consent before the study.

#### P79

##### - Characterization of oral health in a group of elderly adults from Viseu – implications for treatment efficacy

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#### Background

Although it is not recognized and valued by everyone, oral health has a great impact on quality of life, affecting physiological, aesthetic, and social aspects of everyday life. In the elderly oral health issues are prevalent and treatment needs increased. This work presents a characterization of the oral health in an elderly population of Viseu in different dimensions.

#### Materials and methods

Clinical aspects such as tooth loss due to caries, periodontal disease indexes, properties of saliva and total microbial load, as well as *Firmicutes* and *Bacteroidetes* quantification and quality of life indexes were obtained. Questionnaires for sociodemographic data and self-perceived oral health; clinical assessments of oral health indexes and saliva for biochemical and microbiological parameters were used to collect data. Data and sample collection was approved by the ethics committee of IMM and informed consent was signed by every participant in the study.

#### Results