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 31st March and 1st 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 Capeloa 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.

Acknowledgements

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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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- Spiritual aspects of living with spinal cord injury while in rehabilitation: a qualitative review

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Background

According to the World Health Organization, between 250,000 and 500,000 people worldwide suffer a spinal cord injury (SCI) each year, and more than 90% cases are traumatic. These injuries cause profound changes in life and have a negative implication on well-being and quality of life. Spirituality may represent a critical dimension in living and overcoming this condition which usually happens unexpectedly. As so, the healthcare approach considers a holistic paradigm in which individuals are unique and require dignity preserving care. This review aims to identify the spiritual aspects of the experience of adults living with SCI while in the rehabilitation process.

Materials and methods

This review included qualitative studies focusing on spiritual needs, spiritual responses, or spiritual practices of adults with SCI spinal cord injury while in rehabilitation process. No date limits were be applied. No language restrictions were be applied.

The databases searched included CINAHL complete MEDLINE ,Pub-Med, Nursing and Allied Health Collection, CDSR (Cochrane Database of Systematic Reviews), PsycINFO, MedicLatina, and SciELO – Scientific Electronic Library Online. The search for unpublished studies will include Open Grey, RCAAP (Portuguese open access scientific repository), CAPES Brazil – Theses and dissertations. Study selection, critical appraisal, data extraction, and data synthesis were performed by two reviewers, as the review team was organized in each stage to guarantee independent and blind review. The synthesized findings were graded according to the ConQual approach for establishing confidence in findings. Software SUMARI was used to all reviewing process.

Results

Two synthesized findings emerged: spiritual coping strategies used by patients living in this condition (related to beliefs and values); spiritual needs are expressed by these patients in different phases while in the rehabilitations, such as faith, hope, meaning and purpose.

Conclusions

Spiritual needs have been identified and spirituality seem a coping mechanism used by these patients. The evidence from this qualitative review may inform new nursing intervention that can be implemented and tested.

Keywords

Spirituality; Experience; Rehabilitation; Qualitative research; Injuries

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- Validation of an instrument to assess the meaning in suffering: a methodological study

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Background

Suffering is a complex, multidimensional and individual experience extensively described in literature concerning different life and health conditions, but often reduced to a physical perspective as a symptom. The relationship between suffering and meaning in life led to

the development of measurement tools such as it is the case of the Meaning in Suffering Test (MIST). Additionally, recent studies have awakened the interest in the spiritual dimension and meaning in life lived by people with a reproductive health-condition, such as infertility. As such, there is an urge to study the psychometric properties of the Portuguese version of the Meaning in Suffering Test in the Portuguese context. Up to now, only one Portuguese study aimed to validate such tool in a sample of Portuguese adult patients with chronic rheumatic pain.

Materials and methods

More studies are needed to support structural validation and testing of the psychometric properties of MIST in different sets and samples. The Portuguese version of the Spiritual Wellbeing Questionnaire is a tool that could be used in such validation process. This study was approved by the Ethics Committee of Universidade Católica Portuguesa. It was performed a confirmatory factor analysis with a sample of 104 persons under fertility treatment.

Results

It was revealed a poor fit of previous structures and as such an exploratory factor analysis provided a final version with 16 items with three factors: "Meaning in life and subjective characteristics in the face of suffering"; "Positive responses to suffering"; and "Loss of control over suffering".

Conclusions

Further research is necessary to better understand fluctuations in individuals undergoing long-term treatments and test the 16-item and three-factor version as a suitable, valid, and reliable structure for measuring meaning in suffering by nurses providing care to different patients with different health conditions and context.

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- Oral health related quality of life in institutionalized elderly in Viseu

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Background

Portugal has an increasingly aging population, due to the raise of average life expectancy and low birth rates. This situation constitutes a challenge for public health, particularly regarding oral health related quality of life. The objective of this study is to assess the impact of oral health on the quality of life of institutionalized elderly people in the district of Viseu, Portugal.

Materials and methods

An observational descriptive cross-sectional study was designed, composed of a population of elderly residents in nursing homes in the district of Viseu. Data collection was accomplished by an application of a questionnaire to assess sociodemographic and oral health aspects, the GOHAI index and the OHIP-14 index.

Results

The sample consisted of 529 institutionalized elderly aged 65 years or older. As for gender, 69.4% (n=367) are women and 30.6% (n=162) men. According to the GOHAI index, a considerable number of participants (41.5%) have a "moderate" self-perception of oral health. Regarding the OHIP-14 index, it appears that the impact of oral health on quality of life is low, since the average of the global OHIP-14 was 15 (0-56). "Physical pain" was the most affected dimension (2.70), while the dimension with the least impact was "Social limitation" (1.52).

Conclusion

in this research, oral health related quality of life was considered reasonable. However, there are participants in whom the impact of

oral health in the quality of life is significant. Therefore, it is important to continue to develop strategies and join efforts to improve oral health and, consequently, the systemic health and quality of life of institutionalized elderly.

The study protocol was approved by the Ethics Commission for Health of the University (Comisssão de Ética para a Saúde da UCP, Report number 165, 21st of January 2022).

Informed consent was obtained from all participants and all methods were performed in accordance with the Declaration of Helsinki principles for medical research involving human subjects and following the requirements established by Portuguese Law nr 21/2014 for clinical research.

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- "Ser Criança" Project - oral health literacy strategies for the vulnerable children and families

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Background

Over the years, there has been an increasing and effective integration and participation of oral health in the concept of general health. The absence of educational interventions for more vulnerable children, as well as the application of behavioral strategies are still considered gaps in today's society and healthcare services. The main objective of this research was to define strategies of educational interventions in vulnerable children's and their families oral health.

Materials and methods

The interventive actions for the "Ser Criança" Project involves the development of a website - "Ser Criança – Aprender e Sorrir" for three target groups: children, parents and educators / teachers. With this goal, it is expected that children, families and school communities change behavioral habits related to oral health. Also the "Ser Criança" Project involves a specific protocol defining oral health literacy strategies and dental appointments among the children and families.

Results

It is crucial to emphasize that most recreational activities are beneficial in the transmission of motivational values. The use of educational games, exploration of macro dental models, theater and music are valid examples of these activities. Interventions based on digital media (applications or "apps" and the Internet) also prove to be a constant demonstration of success for children's personal and cognitive growth. The development of a digital tool aimed at pre-school and school education, through a web-based aspect allows, especially in the context of the difficult access to oral health services, an immeasurable access to multiple possibilities. A specific oral health appointment protocol was also developed and will be applied among children and their families. This protocol will permit to diagnose oral diseases by teledentistry method, formulating an on-line appointment. Both strategies will be applied among the most vulnerable communities in order to improve the oral health behaviors and diagnosis of oral diseases, mainly, among children.

Conclusions

Educating the next generation using attractive educational, didactic and, above all pedagogical interventions can revolutionize the current teaching landscape, especially in the field of oral health. These strategies shall be applied in the future to study the impact in the oral health and health literacy of vulnerable communities.

Keywords

Intervention, children, oral health literacy, digital education.

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- Understanding the barriers and opportunities for implementing serious games-based rehabilitation as a policy in Portuguese healthcare

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Background

Serious games (SG) are known to have a wide range of applications. Physical rehabilitation is one of them. As the aging index of the Portuguese population steadily increases, it is necessary to improve physical rehabilitation (as a line of therapy for pathologies and incapacities related to old age). This paper aims to find a relationship between the barriers to SG implementation and the way the current and future contexts will bridge the gap between aspirations, necessity and financial viability.

Materials and methods

A PEST (political, economical, social and technological) market analysis of the Portuguese context was conducted, along with an *in loco* investigation achieved through a series of three interviews (to a neurology clinic, to a physiatry clinic and rehabilitation center located in the north of Portugal, and to a Professor and researcher from the Medical School of Universidade do Minho), and a 24-question questionnaire targeted at healthcare professionals (ranging from doctors to nurses, and from heterogeneous specialization areas). 59 subjects participated in the questionnaire. The study in question was submitted and approved by CES-UCP. All participants gave their informed consent before participation in the study.

Results

Portugal has an aged population that needs suitable healthcare, which englobes adequate physical rehabilitation when needed. However, there is a lack of human and material resources. When looking at SG as a potential tool, the industry has a good growth rate, and SG present themselves as a way of channeling human and monetary resources. The lack of knowledge about SG, lack of appropriate SG to use for therapeutic purposes as well as access to them, their cost, the age and social status of the patients, or a prevalent preference towards traditional methods are seen as the main barriers to a wider implementation of SG for physical rehabilitation in the Portuguese territory.

Conclusions

SG proved to be widely unknown among the healthcare sector in Portugal. Additionally, as older generations show little to no interest in the potential of videogames as a form of entertainment, it will make them resistant towards learning about the clinical benefits of using SG for physical rehabilitation. Socially and financially, the Portuguese context supports the implementation of SG as a complementary tool, allowing physical rehabilitation to reach more people at a lower cost while stimulating therapy adherence and supporting a sustainable allocation of funds.

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- Experience reported by the person submitted to a hip or knee arthroplasty, related to the continuity of nursing care

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