

DOUTORAMENTO

CIÊNCIAS DE ENFERMAGEM

# Formalização do Conhecimento Disciplinar em Enfermagem de Saúde Mental e Psiquiatria: Desenvolvimento de Modelos Clínicos de Dados centrados no Delírio e na Alucinação

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Saúde Mental e Psiquiatria: Desenvolvimento de Modelos  
Clínicos de Dados centrados no Delírio e na Alucinação**

Tese de Candidatura ao grau de Doutor em Ciências de Enfermagem submetida ao Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto.

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Que eu preserve a sabedoria de permanecer aprendiz.

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## Resumo

**Introdução:** A evolução da Enfermagem trouxe consigo a procura da sua afirmação enquanto ciência, verificando-se um enfoque crescente na tomada de decisão dos enfermeiros. Os Modelos Clínicos de Dados representam a formalização do conhecimento disciplinar em Enfermagem, ao especificarem os dados relevantes para o raciocínio diagnóstico, as sintaxes que melhor explanam esse raciocínio, as intervenções, bem como a base epistemológica do conhecimento formal que regula a relação entre estes elementos. A especificação de Modelos Clínicos de Dados organizada, a partir de um modelo de referência, por domínios dos focos de atenção dos enfermeiros constitui uma Ontologia de Enfermagem. Esta investigação insere-se na área da Saúde Mental e Psiquiatria e foi delimitada pelos focos de atenção: 'Delírio' e 'Alucinação'. De acordo com Afaf Meleis, a Enfermagem centra-se na facilitação dos processos de transição das pessoas que vivenciam a necessidade de adotar atitudes e comportamentos diferentes, no sentido de lidar, de forma saudável, com três grandes tipos de desafios: despoletados por desequilíbrios no contínuo saúde / doença; associados ao desenvolvimento humano ou situacionais; relacionados com a necessidade de incorporar novas competências para prestar cuidados de saúde a outras pessoas. Esta teoria constitui o modelo de referência nesta investigação.

**Objetivos:** Os objetivos deste trabalho consistem em: 1) Identificar os dados com utilidade clínica no âmbito dos focos de atenção 'Delírio' e 'Alucinação'; 2) Identificar os diagnósticos de Enfermagem que tomam como foco de atenção o "Delírio" e a 'Alucinação'; 3) Identificar as intervenções de Enfermagem relacionadas com os diagnósticos que tomam como foco de atenção o 'Delírio' e a 'Alucinação'; e 4) Analisar as relações entre os itens de informação anteriores – Dados / Diagnósticos / Intervenções.

**Métodos:** Esta investigação integrou quatro estudos. O primeiro centrou-se na análise de conteúdo à parametrização nacional do Sistema de Informação de Enfermagem em uso nos serviços de psiquiatria do Serviço Nacional de Saúde. O segundo foi constituído por um *focus group* com catorze peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem, no sentido de obter contributos para a análise de conteúdo realizada. O terceiro consistiu na realização de duas *scoping reviews* (uma focada no 'Delírio' e outra na 'Alucinação'), centradas em estudos publicados entre 2008 e 2018, com o objetivo de identificar a evidência científica disponível relativamente

aos dados necessários para o processo de diagnóstico, aos diagnósticos e às intervenções de Enfermagem no âmbito daqueles dois focos de Enfermagem. O quarto estudo consistiu na realização de dois *focus groups*, um composto por onze peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem (já envolvidos no segundo estudo) e outro composto por oito peritos na área da Enfermagem de Saúde Mental e Psiquiatria, com o objetivo de sistematizar os achados do estudo anterior em Modelos Clínicos de Dados no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação'.

**Resultados:** No primeiro e no segundo estudos, os 2014 enunciados de diagnóstico iniciais encontrados na área de saúde mental foram sistematizados em 78 categorias de diagnóstico finais. Os 2881 enunciados de intervenção iniciais encontrados na área de saúde mental foram sistematizados em 198 categorias de intervenção finais. Estas categorias poderão representar os principais diagnósticos e as principais intervenções parametrizados na área da Enfermagem de Saúde Mental e Psiquiatria, em Portugal. Algumas questões identificadas nesta análise foram alvo de reflexão, nomeadamente, a inconsistência na sistematização da representação dos enunciados dos diagnósticos e das intervenções, apesar da utilização sistemática da Classificação Internacional para a Prática de Enfermagem®. O terceiro estudo permitiu identificar os dados relevantes para o processo de diagnóstico, os diagnósticos e as intervenções de Enfermagem recomendados pela literatura no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação'. O último estudo possibilitou construir os Modelos Clínicos de Dados finais, que reconhecem duas perspetivas sob as quais a pessoa com delírio e / ou alucinação pode ser vislumbrada: uma perspetiva centrada na gestão de sinais e sintomas e prevenção de complicações, na qual os diagnósticos de Enfermagem são centrados no problema e as intervenções têm como objetivo reduzir a frequência e a intensidade do problema ou impedir que ele se agrave; outra perspetiva centrada na transição do cliente, na qual os diagnósticos de Enfermagem são centrados no potencial do cliente, refletindo um conjunto de competências que ele deverá adquirir para se tornar capaz de gerir o problema, e as intervenções do enfermeiro centram-se em assistir o cliente a desenvolver estas competências.

**Conclusões:** Na análise realizada à parametrização nacional foram encontrados erros na construção sintática dos diagnósticos, duplicação de frases diagnósticas, bem como erros na sintaxe das intervenções, intervenções sem utilidade clínica e intervenções que traduzem intenções, não ações. A construção dos Modelos Clínicos de Dados centrados no 'Delírio' e na 'Alucinação', sustentados na evidência científica e tendo por base os contributos de peritos nas áreas da representação do conhecimento numa Ontologia de Enfermagem e da Enfermagem de Saúde Mental e Psiquiatria, tem o potencial de

minimizar as lacunas identificadas na documentação atual e de contribuir para a formalização do conhecimento em Enfermagem no âmbito destas importantes áreas de atenção, apoiando os enfermeiros na sua tomada de decisão e, conseqüentemente, na melhoria da qualidade dos seus cuidados.

**Palavras-chave:** Enfermagem; Saúde Mental; Conceção de cuidados; Tomada de Decisão; Sistemas de Informação em Enfermagem; Ontologia de Enfermagem; Teoria das Transições de Meleis; Modelos Clínicos de Dados; Delírio; Alucinação.

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## Abstract

**Background:** The evolution of nursing prompted the search for its affirmation as a science in its own right, bringing about an increasing emphasis on nurses' decision-making. Clinical data models represent the formalisation of knowledge in the discipline of nursing, by specifying the relevant data for diagnostic reasoning, the syntaxes that best explain this reasoning, the interventions and the epistemological basis of formal knowledge that governs the relationship between them. The specification of clinical data models based on a reference model and organised according to domains of the nurses' focus constitutes a nursing ontology. This research belongs to the field of mental health and psychiatry and was delimited by the focuses: 'Delusion and 'Hallucination'. According to Afaf Meleis, nursing concentrates on enabling the transition processes of people who experience the need to adopt different attitudes and behaviours, in order to deal with three major types of challenges in a healthy manner: those triggered by imbalances in the health / disease continuum, whether situational or associated with human development or related to the need to incorporate new skills in order to provide health care to other people. This theory constitutes the reference model in this research.

**Aims:** The aims of this research are to: 1) Identify clinical useful data within the scope of the focuses 'Delusion and 'Hallucination'; 2) Identify the nursing diagnoses that focus on "Delusion" and "Hallucination"; 3) Identify the nursing interventions related to the diagnoses that focus on 'Delusion and 'Hallucination'; and 4) Analyse the relationships between the abovementioned elements of information – Data / Diagnoses / Interventions.

**Methods:** This research integrated four studies. The first focused on content analysis of the national parameterisation of the nursing information system in use in the psychiatric services of the National Health Service. The second was made up of a focus group with fourteen experts in the field of the representation of nursing knowledge in a nursing ontology, in order to obtain contributions on the content analysis performed. The third consisted of two scoping reviews (one focused on 'Delusion' and one on 'Hallucination'), centred on papers published between 2008 and 2018, with the aim of identifying the available scientific evidence regarding the data needed for the diagnostic process, regarding nursing diagnoses and interventions within those two nursing focuses. The fourth study consisted of two focus groups, one composed of eleven experts in the field of the representation of nursing knowledge in a nursing ontology (already involved in the second

study) and the other composed of eight experts in the field of mental health and psychiatric nursing, in order to systematise the findings of the previous study in clinical data models within the scope of the nursing focuses 'Delusion' and 'Hallucination'.

**Results:** In the first and second studies, the 2014 initial diagnosis records found across the field of mental health were systematised into 78 of final diagnostic categories. The 2881 initial intervention records found throughout the field of mental health were systematised into 198 final intervention categories. These categories may represent the main diagnoses and the main interventions documented in the field of mental health and psychiatric nursing, in Portugal. Some issues identified in this analysis were the subject of reflection, in particular, the inconsistency in the systematisation of diagnosis and intervention records, despite the systematic use of the International Classification for Nursing Practice®. The third study made it possible to identify the relevant data for the diagnostic process, the nursing diagnoses and interventions recommended by the literature within the scope of the nursing focuses 'Delusion' and 'Hallucination'. The last study made it possible to construct the final clinical data models, which recognise two perspectives from which the person with delusion and / or hallucination can be viewed: a perspective centred on the management of signs and symptoms and the prevention of complications, in which the nursing diagnoses focus on the problem and the interventions seek to reduce the frequency and intensity of the problem or prevent it from deteriorating; another perspective centred on the client's transition, in which the nursing diagnoses are centred on the client's potential, reflecting a set of skills that they must acquire in order to be able to manage the problem, and the nurse's interventions focus on helping the client to develop these skills.

**Conclusions:** In the analysis carried out on national parameterisation, errors were found in the syntactic construction of diagnoses, duplication of diagnostic wording, as well as errors in the syntax of interventions, interventions without clinical utility and interventions that correspond to intentions and not to actions. The construction of clinical data models centred on 'Delusion' and 'Hallucination' supported by scientific evidence and based on the contributions of experts in the fields of the representation of nursing knowledge in a nursing ontology and mental health and psychiatric nursing has the potential to minimise the gaps identified in the current documentation and to contribute towards the formalisation of nursing knowledge within the scope of these important fields of care, supporting nurses in their decision-making and, consequently, in improving the quality of the care they provide.

**Keywords:** Nursing; Mental Health; Care design; Decision-making; Nursing Information Systems; Nursing Ontology; Meleis Transition Theory; Clinical Data Models; Delusion; Hallucination.

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## **Siglas**

**CIDESI:** Centro de Investigação e Desenvolvimento dos Sistemas de Informação

**CIPE®:** Classificação Internacional para a Prática de Enfermagem

**ESEP:** Escola Superior de Enfermagem do Porto

**ICBAS:** Instituto de Ciências Biomédicas Abel Salazar

**ICN:** International Council of Nurses

**MCD:** Modelo(s) Clínico(s) de Dados

**NIC:** *Nursing Interventions Classification* – Classificação das Intervenções de Enfermagem

**NOC:** *Nursing Outcomes Classification* – Classificação dos Resultados de Enfermagem

**PANSS:** Positive and Negative Syndrome Scale

**SAPE®:** Sistema de Apoio à Prática de Enfermagem

**SNS:** Serviço Nacional de Saúde

**SIE:** Sistemas de Informação em Enfermagem

**SPMS:** Serviços Partilhados do Ministério da Saúde

**UNIESEP:** Unidade de Investigação da Escola Superior de Enfermagem do Porto

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## **Outras publicações (não incluídas nesta tese) e apresentações em eventos científicos no âmbito desta investigação**

### **Capítulo de livro**

Gonçalves, P., Sampaio, F., Sequeira, C. 2020. "Processo de Enfermagem, CIPE® e Sistemas de Informação". *In* Enfermagem em Saúde Mental Diagnósticos e Intervenções. Lisboa, Portugal: Lidel - Edições Técnicas, Lda.

Gonçalves, P., Sampaio, F., Sequeira, C. 2020. "Delírio". *In* Enfermagem em Saúde Mental Diagnósticos e Intervenções. Lisboa, Portugal: Lidel - Edições Técnicas, Lda.

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### **Apresentação de póster**

Gonçalves, P., Sequeira, C., Silva, M., Silva, A. 2020. "Formalização do conhecimento disciplinar em Enfermagem de Saúde Mental e Psiquiatria: Desenvolvimento de um modelo clínico de dados centrado na Alucinação, usando a Teoria das Transições de Meleis como modelo teórico de referência". Trabalho apresentado no XI Congresso d'A Sociedade Portuguesa de Enfermagem de Saúde Mental e Psiquiatria. Obtenção do prémio de 2º lugar (em 37 pósteres apresentados).

Gonçalves, P., Sequeira, C., Silva, M. 2019. "Dados, diagnósticos e intervenções referentes ao foco de enfermagem 'Delírio': Uma scoping review". Trabalho apresentado em 10 Years of the Doctoral Programme in Nursing Sciences.

Gonçalves, P., Sequeira, C., Silva, M. 2019. "Dados, diagnósticos e intervenções referentes ao foco de enfermagem 'Alucinação': Uma scoping review". Trabalho apresentado em Congresso Internacional Investigação, Inovação & Desenvolvimento em Enfermagem (NursID).

Gonçalves, P., Sequeira, C., Silva, M. 2018. "Intervenções de Enfermagem em Saúde Mental e Psiquiatria Documentadas em Portugal". Trabalho apresentado em Congresso Internacional Investigação, Inovação & Desenvolvimento em Enfermagem (NursID).

Gonçalves, P., Sequeira, C., Silva, M. 2017. "Diagnósticos de Enfermagem em Saúde Mental e Psiquiatria". Trabalho apresentado em Congresso Internacional Investigação, Inovação & Desenvolvimento em Enfermagem (NursID).

### **Apresentação oral de trabalho**

2020.10.16: "Formalização do Conhecimento Disciplinar em Enfermagem de Saúde Mental e Psiquiatria: Desenvolvimento de Modelos Clínicos de Dados Centrados no Delírio e na Alucinação". Sessão de Abertura do Doutoramento em Ciências de Enfermagem 2020-2021. Instituto de Ciências Biomédicas Abel Salazar.

2018.10.17: "Modelo Clínico de Dados: Delírio e Alucinação". II Seminário Internacional de Investigação em Saúde & IX Congresso Internacional d'A Sociedade Portuguesa de Enfermagem de Saúde Mental. Instituto Politécnico de Bragança (Bragança, Portugal).

2018.01.19: "Diagnósticos e Intervenções de Enfermagem em Saúde Mental e Psiquiatria". Seminário "Contributos de enfermagem no envelhecimento e saúde mental. Que caminhos a percorrer?". Escola Superior de Saúde de Santa Maria.

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2017.06.12: "Diagnósticos e intervenções psicoterapêuticas em Enfermagem". Seminário Internacional de Investigação em Enfermagem de Saúde Mental. Instituto de Ciências Biomédicas Abel Salazar (Porto, Portugal).

2016.11.04: "Censos de Enfermagem de Saúde Mental nos Internamentos de Psiquiatria: Principais Diagnósticos e Intervenções de Enfermagem". VII Congresso Internacional d'A Sociedade Portuguesa de Enfermagem de Saúde Mental. Escola Superior de Saúde, Instituto Politécnico de Viana do Castelo (Viana do Castelo, Portugal).

## Introdução

A presente tese de Doutoramento foi elaborada no âmbito do Programa Doutoral em Ciências de Enfermagem da Universidade do Porto, que consiste numa parceria entre o Instituto de Ciências Biomédicas Abel Salazar (ICBAS) e a Escola Superior de Enfermagem do Porto (ESEP). Este Programa procura dar resposta à necessidade de especificar, fortalecer e delimitar o objeto de estudo da Enfermagem e visa a identificação dos elementos que caracterizam os cuidados de Enfermagem e o desenvolvimento de competências na construção da Enfermagem enquanto disciplina científica, destacando o papel do enfermeiro na facilitação de transições saudáveis por parte dos indivíduos. O projeto a que este relatório se reporta foi iniciado em 2016 e finalizado em 2020.

Este relatório descreve um percurso de cerca de quatro anos, no qual desenvolvemos uma investigação tendo em vista a construção de Modelos Clínicos de Dados (MCD) no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação'. Com esta investigação pretendemos contribuir para a melhoria da qualidade dos cuidados de Enfermagem de Saúde Mental e Psiquiatria através da sistematização e da estruturação da informação acerca dos dados, dos diagnósticos e das intervenções no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação', contribuindo para a formalização do conhecimento de Enfermagem nestas áreas.

Neste capítulo introdutório, pretendemos apresentar e explicitar a problemática do estudo. Começaremos por abordar a Enfermagem enquanto disciplina do conhecimento científico, enfatizando o percurso de clarificação do seu objeto de estudo e a importância da tomada de decisão por parte dos enfermeiros. Após, particularizaremos a Enfermagem de Saúde Mental e Psiquiatria, destacando alguns modelos e teorias de Enfermagem que marcaram a sua evolução. Daí seguiremos para a abordagem aos dois focos de Enfermagem que constituem a base desta investigação: o Delírio e a Alucinação. Finalmente, abordaremos a temática da Conceção de cuidados em Enfermagem de Saúde Mental e Psiquiatria, explorando algumas áreas relevantes neste domínio: os Sistemas de Informação em Enfermagem (SIE), a Ontologia de Enfermagem, os MCD em Enfermagem e os principais conceitos subjacentes ao modelo teórico de referência nesta investigação, A Teoria das Transições de Meleis.

Após o capítulo introdutório, apresentaremos a finalidade e os objetivos desta investigação e a sua metodologia geral. Seguidamente, apresentaremos os artigos que resultaram deste

trabalho: quatro artigos publicados em revistas científicas (Artigos 1 a 4) e um último artigo que se encontra atualmente sob revisão (Artigo 5). Os artigos encontram-se apresentados de uma forma sequencial, de acordo com os passos que esta investigação seguiu. Concluiremos este relatório com uma síntese dos principais resultados obtidos, refletindo e discutindo sobre a sua relevância para a disciplina de Enfermagem, bem como as principais conclusões e recomendações para a prática.

Esta investigação teve por base uma ampla pesquisa bibliográfica. Foi consultada bibliografia disponível na biblioteca da ESEP, bem como estudos disponíveis nas bases de dados Academic Search Complete, CINAHL Complete, CINAHL Plus with Full Text, ERIC, Library, Information Science & Technology Abstracts, MEDLINE with Full Text, Psychology and Behavioral Sciences Collection, Web of Science e Scopus.

## 1. Enfermagem, Disciplina do Conhecimento Científico

A construção do conhecimento em Enfermagem é um processo que se reporta há mais de 140 anos (Andrade et al. 2008). Apesar das fragilidades inerentes a uma ciência que se encontra em crescimento e em estruturação (Queirós et al. 2015), é inegável a evolução da Enfermagem, pautada pela procura da sua afirmação enquanto disciplina do conhecimento científico. Tal como outras profissões, a disciplina de Enfermagem requer uma base de conhecimento sustentado em teorias e em evidência (Stolley et al. 2000; Watson 2017).

A Enfermagem tem um saber próprio, que se diferencia de outros saberes disciplinares. O conhecimento em Enfermagem agrega o saber sistematizado em evidências científicas e os saberes individualmente interpretados, construídos e postos em ação (Queirós 2014). O saber em enfermagem *permite dar resposta a uma prática e ao mesmo tempo estrutura-se nessa prática, através de tomadas de decisão clínica, em contexto de grande complexidade, variabilidade, imprevisibilidade e incerteza*. A tomada de decisão em Enfermagem é resultante de processos reflexivos que têm por base a evidência científica e a *intuição, estética, ética, conhecimento processual e tácito, compreensão do ambiente e experiência no fazer* (Queirós et al. 2015, pp. 16 e 17).

A evolução do pensamento em Enfermagem processou-se, ao longo da sua história, através dos contributos de escolas, teorias e modelos. Na história da Enfermagem, é fundamental a referência a Florence Nightingale, considerada a fundadora da Enfermagem profissional (Karimi et al. 2015). Nightingale contribuiu exponencialmente para o desenvolvimento da Enfermagem enquanto profissão, estabelecendo princípios basilares e contribuindo para a autonomia da disciplina e para uma prática mais baseada em evidência (Shetty 2016). Teve, também, um papel pioneiro na educação em Enfermagem, influenciando-a significativamente. Em 1860, criou a primeira escola de Enfermagem do mundo: *The Nightingale Training School for Nurses*.

Como preconiza Silva (2011, p. 25), o caminho iniciado por Florence Nightingale com o objetivo de identificar o objeto de estudo da Enfermagem, distinguindo-o do de outras disciplinas, foi descontinuado, verificando-se que *o domínio biomédico das práticas, disciplinarmente mais desenvolvido e socialmente mais poderoso, predominou sobre o que tinha sido iniciado por Nightingale dirigido ao core da enfermagem: a saúde, a higiene, o ambiente e o cuidado*.

Na década de 50 do século passado, emergiram diferentes teorias e modelos conceptuais de Enfermagem, que procuraram clarificar o que é a Enfermagem e o que a distingue das

outras disciplinas da área das ciências da saúde. As teorias de Enfermagem foram a base da riqueza conceptual desenvolvida desde Nightingale e estabelecem-se como guias para a tomada de decisão dos enfermeiros (Machado 2004).

Em Portugal, também se procurou clarificar o papel do Enfermeiro, salientando-se a importância da sua tomada de decisão. No final da década de 80, *na equipa multiprofissional, o enfermeiro assumia um papel independente na tomada de decisões face às suas intervenções, decisões estas, que tinham por base o uso sistemático do processo de enfermagem* (Machado 2004, p. 114). Também a Ordem dos Enfermeiros veio salientar as intervenções autónomas dos enfermeiros, resultantes da sua decisão / conceção, reconhecendo que o enfermeiro identifica as necessidades de cuidados de Enfermagem e prescreve intervenções, no sentido de produzir resultados positivos ou ganhos em saúde (Ordem dos Enfermeiros 1996; Ordem dos Enfermeiros 2002).

Como preconiza Ferreira (1981, p. 118 cit. por Machado 2004), *uma profissão é autónoma quando por si mesma estabelece o que é que os seus membros podem fazer, como o devem fazer (...) Uma profissão ou é autónoma ou não é ainda uma profissão*. Também Fourez (2008 cit. por Queirós et al. 2015, p. 17) determina que *para que uma disciplina possa nascer, é preciso que os seus especialistas consigam criar a sua zona de autonomia na encruzilhada de vários grupos sociais*. A questão da autonomia do enfermeiro nas suas decisões foi central no desenvolvimento da Enfermagem enquanto profissão e enquanto disciplina do conhecimento.

Paralelamente a esta sucessiva procura de clarificação do exercício profissional dos enfermeiros, operaram-se mudanças no âmbito do ensino de Enfermagem em Portugal. Até 1920, o ensino era maioritariamente teórico e os conhecimentos transmitidos por médicos. Entre 1920 e 1940, assistiu-se a um aumento das ações das congregações religiosas nos hospitais portugueses, com a criação de escolas de Enfermagem para formar os seus membros. Grandes mudanças ocorreram entre 1940 e 1955 com a adoção do Modelo Nightingale. Este modelo teve um contributo relevante na evolução da Enfermagem portuguesa. No entanto, as decisões continuavam a ser influenciadas pelos médicos, que se mantinham responsáveis pelo ensino de Enfermagem e pela elaboração dos manuais que sustentavam este ensino (Silva 2015). Em julho de 1965, o Decreto de Lei 46:448 defendia, entre vários aspetos, que o ensino de Enfermagem deveria ser realizado por enfermeiros (Ordem dos Enfermeiros 2008).

Em 1999, a formação graduada em Enfermagem passou a ser assegurada pelo Curso de licenciatura em Enfermagem, com um acréscimo significativo de competências nas áreas da gestão de serviços de saúde, da formação e da investigação em Enfermagem (Ordem

dos Enfermeiros 2008). Os primeiros mestrados em Ciências de Enfermagem iniciaram-se em 1992 e o primeiro Doutoramento em Enfermagem foi alcançado no ano de 2001, na Universidade do Porto. Atualmente, o desenvolvimento científico e técnico das ciências de Enfermagem é da responsabilidade dos enfermeiros (Ordem dos Enfermeiros 2008; Silva 2011).

A evolução da história da Enfermagem foi pautada pela procura da sua afirmação enquanto disciplina do conhecimento científico. As teorias que emergiram no século XX procuraram clarificar o que é a Enfermagem e qual o seu objeto de estudo. Paralelamente, verificou-se uma evolução nos conteúdos que as escolas de Enfermagem procuravam transmitir. A autonomia do enfermeiro nas suas decisões e a procura da natureza específica da Enfermagem, na qual esta autonomia pode ser exercida, foi fundamental para a evolução da Enfermagem enquanto disciplina do conhecimento científico. A Enfermagem assume-se, hoje, como uma disciplina com um corpo de conhecimentos próprio e uma natureza específica, com um papel único na sociedade.

## **2. A Enfermagem de Saúde Mental e Psiquiatria**

A saúde mental é parte integrante da saúde em geral, do bem-estar e da qualidade de vida. A carta da Organização Mundial da Saúde, aprovada em 1948, define o conceito de saúde como um estado de completo bem-estar físico, mental e social e não apenas a ausência de doença ou enfermidade. De acordo com a mesma entidade, estas diferentes componentes do bem-estar que o conceito de saúde comporta estão estreitamente entrelaçadas e são profundamente interdependentes, pelo que a saúde mental é tão importante como a saúde física para o bem-estar dos indivíduos (Organização Mundial da Saúde 2001; Organização Mundial da Saúde 2013).

Ao longo da história, crenças sociais e profissionais acerca da doença mental afetaram a natureza da Enfermagem psiquiátrica. O estigma associado à doença mental constituiu, ao longo do tempo, um entrave à sua profissionalização. Durante o período da Segunda Guerra Mundial, uma nova visão de Enfermagem psiquiátrica começou a ganhar forma: A visão de Hildegard Peplau. Numa época em que os enfermeiros trabalhavam sob a orientação dos médicos, Peplau liderou eventos incomuns de profissionalização da Enfermagem psiquiátrica que a levaram a ser tratada como “A mãe da Enfermagem Psiquiátrica” / “Pioneira da Enfermagem Psiquiátrica” (Marriner-Tomey 1994; Boling 2003; Stefanelli et al. 2008). A contribuição de Peplau para uma prática de Enfermagem avançada teve início com o desenvolvimento do papel de *Clinical Nurse Specialist*, cuja prática era dedicada à psicoterapia individual, familiar e de grupo. Peplau colaborou, de

forma preponderante, na formação graduada e no desenvolvimento de mestrados em ciências de Enfermagem, tendo sido, também, promotora da utilização das enfermeiras psiquiátricas em ambientes pouco tradicionais, tais como o domicílio, alargando os horizontes da profissão (Caldwell et al. 2012). Em 1952, o seu livro *Interpersonal Relations in Nursing: Offering a Conceptual Frame of Reference for Psychodynamic Nursing*, centrado na relação interpessoal como a estrutura fundamental para o trabalho dos enfermeiros, veio a constituir-se a base do ensino de Enfermagem em geral e da Enfermagem psiquiátrica em particular (D'Antonio et al. 2014).

Da teoria de Peplau emergiram conceitos chave, tais como o de empatia, e princípios fundamentais, tais como a importância do relacionamento interpessoal construtivo e das relações interpessoais terapêuticas como um meio de propiciar o caminhar dos clientes no sentido da independência (Stefanelli et al. 2008). Peplau (1952, in Peplau 1990) vislumbrava a Enfermagem como a relação terapêutica entre uma pessoa doente ou necessitada de serviços de saúde e um enfermeiro com uma formação especializada para reconhecer e responder à necessidade de ajuda, encarando a relação interpessoal como o processo fundamental para a resolução dos problemas da Pessoa.

A profissionalização da Enfermagem psiquiátrica ocorreu, também, a par dos avanços que a “Década do Cérebro” despoletou. Em 1994, a *American Nurses Association*, a *American Psychiatric Nurses Association*, a *Association of Child and Adolescent Psychiatric Nurses* e a *Society for Education and Research in Psychiatric-Mental Health Nursing* escreveram uma declaração conjunta e sem precedentes intitulada de *Psychiatric-Mental Health Clinical Nursing Practice and Standards of Psychiatric-Mental Health Clinical Nursing Practice*, na qual identificaram as problemáticas emergentes, as tendências e os assuntos mais recentes, providenciando um guia para a interpretação das responsabilidades dos enfermeiros no âmbito da especialidade de saúde mental (Boling 2003).

Outros modelos e outras teorias de Enfermagem usados em saúde mental podem ser destacados, nomeadamente o Modelo de Relação Pessoa a Pessoa de Joyce Travelbee, de 1967, a Teoria Humanista de Paterson e Zderad, de 1976 e o Modelo de Maré (*Tidal Model*) de Phil Baker, de 2000. Da revisão de literatura acerca dos modelos e das teorias de Enfermagem de Saúde Mental, retém-se que estes se orientam fundamentalmente para a intervenção dos enfermeiros, definindo princípios de atuação. Em contrapartida, poucos contributos fornecem para os processos, ou seja, para a organização e para o planeamento dos cuidados em saúde mental, considerando todas as suas etapas.

### 3. Delírio e Alucinação

O 'Delírio' e a 'Alucinação' são dois importantes focos e diagnósticos de Enfermagem, classificados como tal na Classificação Internacional para a Prática de Enfermagem (CIPE®).

De acordo com o *International Council of Nurses* (ICN 2017), o delírio é uma crença prejudicada, constituindo-se como um falso senso da realidade, que não pode ser corrigido pela razão, argumento ou persuasão, ou pela evidência dos próprios sentidos. Em 1923, Karl Jaspers (cit. por Eisen et al. 1998) definiu o delírio como um julgamento feito com plena convicção, não apenas com uma consciência de validade, mas com um senso de certeza absoluta. De acordo com Kay e colaboradores (1987), o delírio é uma crença infundada, irrealista e idiossincrática. Esta falsa crença desenvolve-se independentemente do contexto cultural ou religioso da pessoa ou do seu nível intelectual (Kiran et al. 2009). Os delírios são, portanto, crenças fixas que não são passíveis de alterar, mesmo à luz de evidência em contrário, podendo incluir uma variedade de temas (delírio persecutório, delírio místico, delírio de grandiosidade, entre outros) (American Psychiatric Association 2014).

Os delírios representam um conceito complexo, mas fundamental na área da Saúde Mental e Psiquiatria. Eles são a pedra angular da psicose e o principal sintoma do diagnóstico de perturbação delirante no Manual de Diagnóstico e Estatística das Perturbações Mentais (DSM-5) (American Psychiatric Association 2014). A presença de delírios é importante no diagnóstico de esquizofrenia, de transtorno delirante e de transtorno do humor com características psicóticas (Eisen et al. 1998).

Os delírios são um sintoma de um distúrbio neurológico ou mental. Podem estar presentes em qualquer um dos seguintes transtornos mentais: (1) Transtornos psicóticos, incluindo a esquizofrenia, o transtorno esquizoafetivo, o transtorno delirante, o transtorno esquizofreniforme, o transtorno psicótico compartilhado, o distúrbio psicótico breve e o transtorno psicótico induzido por substâncias, (2) Transtorno bipolar, (3) Transtorno depressivo major com características psicóticas, (4) Delirium e (5) Demência (Kiran et al. 2009).

Um dos aspetos mais desafiantes no tratamento do delírio prende-se com o facto de que a maioria das pessoas com delírio tem uma consciencialização (crítica, *insight*, *awareness*) limitada do seu problema (Liu et al. 2018). É, portanto, imperativo reforçar a consciencialização do delírio, a sua avaliação e a sua gestão.

A alucinação é definida pelo ICN (2017) como uma percepção prejudicada, constituindo-se como o registo aparente de estímulos sensoriais que não estão efetivamente presentes. É classificada de acordo com o sentido que está envolvido na experiência alucinatória – alucinação auditiva, visual, olfativa, gustativa ou tátil.

Num estudo realizado por Lim e colaboradores (2016), a prevalência de alucinação em 750 doentes diagnosticados com perturbações do espectro da esquizofrenia durante a vida foi de 80%. Apesar de a alucinação ser tipicamente associada à esquizofrenia ou a perturbações do espectro psicótico, uma análise transnacional baseada em 31261 entrevistados de 18 países mostrou que a prevalência média, numa vida, de alguma vez se experienciar uma experiência alucinatória, em indivíduos saudáveis, foi de 5,2% (McGrath et al. 2015). As alucinações podem ocorrer não apenas em pessoas com distúrbios psiquiátricos, mas, também, em pessoas com distúrbios neurológicos (como a doença de corpos de Lewy e a doença de Alzheimer), em pessoas com distúrbios oculares (como a síndrome de Charles Bonnet) e, até, em indivíduos saudáveis (Meppelink 2015).

As pessoas com alucinação requerem assistência por parte dos profissionais de saúde mental, nomeadamente, os enfermeiros de saúde mental (Petrus et al. 2012). No entanto, poucos são os modelos atualmente existentes que apoiam os enfermeiros de saúde mental na avaliação e no cuidado aos doentes que as experienciam (Buccheri et al. 2013).

Apesar de o delírio e de a alucinação serem fenómenos prevalentes, principalmente no contexto da Saúde Mental e Psiquiatria, não foram encontrados estudos na literatura que forneçam informação completa e sistematizada sobre o processo de conceção de cuidados de Enfermagem relacionado com estes importantes focos de atenção. Apesar de alguns esforços neste sentido (Herdman et al. 2017; ICN 2017; Johnson et al. 2012), a limitada investigação neste domínio traduz-se na ausência de conhecimento formalizado sobre os dados relevantes para o raciocínio diagnóstico, os diagnósticos e as intervenções de Enfermagem que relevam nestas áreas, bem como as suas relações, fundamental para uma tomada de decisão sustentada por parte dos enfermeiros.

#### **4. Conceção de Cuidados em Enfermagem de Saúde Mental e Psiquiatria**

Com a necessidade de uma afirmação progressiva da disciplina de Enfermagem, evoluiu-se de uma lógica meramente executiva para uma abordagem centrada na conceção de cuidados e na tomada de decisão dos enfermeiros. Se, numa fase inicial do desenvolvimento da profissão, os enfermeiros assumiam uma conduta centrada essencialmente na execução de tarefas (maioritariamente prescritas por outros

profissionais), atualmente, o seu foco de atenção dirige-se ao exercício profissional autónomo, que faz emergir a importância do raciocínio clínico, base da tomada de decisão (Silva 2006<sup>1</sup>; Silva 2011). O raciocínio clínico é o processo que permite a colheita de dados, a resolução de problemas e a tomada de decisão, no sentido da prestação de cuidados de Enfermagem com qualidade (Kuiper et al. 2009).

A tomada de decisão clínica é levada a cabo pelos enfermeiros diariamente quando realizam julgamentos acerca dos cuidados que devem providenciar aos clientes (Carnevali et al. 1993). Como salientam Kremer e colaboradores (2002), a capacidade para realizar julgamentos clínicos adequados é decisiva na prática profissional de Enfermagem. Tomar decisões é a etapa final conduzida pelo raciocínio. Todos os enfermeiros tomam decisões, na medida em que realizam julgamentos sobre as necessidades das pessoas e determinam as intervenções a implementar (Silva 2011).

A Enfermagem de Saúde Mental tem em vista o diagnóstico e a intervenção *perante respostas humanas desajustadas ou desadaptadas aos processos de transição* (Ordem dos Enfermeiros 2010, p. 1). O diagnóstico e a intervenção constituem fases cruciais do processo de Enfermagem, que representa a forma sistemática e dinâmica de prestar cuidados de Enfermagem. É o processo de raciocínio clínico dos enfermeiros que sustenta o processo de conceção de cuidados (Silva 2011).

O processo de Enfermagem é um método sistemático, rigoroso e eficiente de organização dos processos de pensamento para uma tomada de decisão clínica efetiva, centrada na resolução de problemas e na prestação de cuidados de Enfermagem individualizados (Ackley et al. 2014; Silva 2011). É dividido em cinco passos – avaliação inicial, diagnóstico, planeamento, implementação e avaliação final – que visam ajudar o enfermeiro a abordar os potenciais problemas dos clientes de uma forma estruturada e rigorosa.

Da aplicação dos passos do processo de Enfermagem resultará uma maior apetência do enfermeiro para considerar várias possibilidades, em vez de se precipitar rapidamente para uma conclusão, de uma forma não fundamentada. Nesta medida, a utilização do processo de Enfermagem evita a realização de inferências por parte do enfermeiro sem que antes ele tenha, na sua posse, todos os dados que lhe permitam tirar conclusões (Carpenito-Moyet 2005; Doenges et al. 2010).

Os enfermeiros colhem, analisam e interpretam dados, de modo a emitirem um juízo clínico acerca da condição de saúde e, desse modo, formularem um diagnóstico de Enfermagem (Nanda International 2015). Os dados são (...) *unidades elementares de informação (...)* que os enfermeiros colhem tendo em vista *identificar problemas reais ou potenciais, ou oportunidades de desenvolvimento do doente* (Silva 2011, p. 44). A relação entre os dados

permite a sua evolução para informação (Silva 2011). Esta informação é traduzida num diagnóstico de Enfermagem, que é definido pelo ICN (2016, p. 17) como um *rótulo atribuído por um enfermeiro à decisão sobre um fenómeno que constitui o foco das intervenções de enfermagem (...)*.

Como salientam Carnevali e colaboradores (1993), fazer julgamentos diagnósticos e decidir envolve receber informação dos clientes e do ambiente em que se inserem, processar essa informação, classificá-la e tomar decisões para agir. A capacidade para realizar julgamentos clínicos adequados é decisiva na prática profissional de Enfermagem (Kremer et al. 2002). A Ordem dos Enfermeiros (2012) preconiza que a tomada de decisão para a identificação diagnóstica é de extrema relevância, uma vez que é da correta identificação das necessidades de cuidados que resultará a prescrição das intervenções adequadas para detetar precocemente problemas potenciais ou resolver / minimizar os problemas reais.

A intervenção de Enfermagem consiste numa *ação tomada em resposta a um diagnóstico de enfermagem, de modo a produzir um resultado de Enfermagem (...)* (ICN 2016, p. 17). De acordo com Doenges e colaboradores (2010, p. 87), as intervenções de Enfermagem são *indicações de comportamentos, tratamentos, atividades ou ações que ajudam o doente a atingir os resultados esperados*.

A conceção de cuidados em Enfermagem envolve múltiplas tomadas de decisão (Silva 2011). Estas decisões reportam-se à escolha dos dados a recolher, à identificação dos diagnósticos que resultam dos dados recolhidos e à prescrição das intervenções que dão resposta aos diagnósticos identificados. Como salienta Silva (2011), é necessário promover a sistematização na explanação da conceção de cuidados, assegurando a integridade referencial – relação adequada e portadora de sentido – entre os elementos do processo de Enfermagem – os dados iniciais, os diagnósticos, os objetivos e, essencialmente, as intervenções.

O uso de uma linguagem comum para descrever os elementos do processo de Enfermagem promove uma abordagem sistemática do cuidado ao doente e permite descrever a prática de Enfermagem de um modo preciso e rigoroso (Escalada-Hernández et al. 2015). Como salienta Silva<sup>1</sup> (2006, p. 29), *só comunicamos através da linguagem se todos atribuímos aos mesmos significantes os mesmos significados*.

A CIPE®, do Conselho Internacional dos Enfermeiros, é uma terminologia consensual que representa os diagnósticos e as intervenções de Enfermagem (ICN 2016). É a única terminologia de Enfermagem incluída no *World Health Organization Family of International Classifications* (Sequeira et al. 2018). A sua criação representou um passo essencial para

a adoção de uma linguagem mais uniformizada por parte dos enfermeiros, principalmente no que diz respeito à definição dos diagnósticos e das intervenções de Enfermagem.

A CIPE®, versão 2015 (ICN, 2016), encontra-se dividida em sete eixos: Foco, Juízo, Recursos, Ação, Tempo, Localização e Cliente. Aquando do seu desenvolvimento, pretendia-se criar uma classificação internacionalmente útil para descrever a prática de Enfermagem. Para tal, o ICN definiu critérios que se mantêm pertinentes. Assim, a CIPE® deverá ser: 1) *Suficientemente vasta para servir os múltiplos propósitos requeridos por diversos países*; 2) *Suficientemente simples para ser vista pelos enfermeiros, no dia-a-dia, como uma descrição da prática com significado e como um meio útil de estruturar essa mesma prática*; 3) *Consistente com quadros de referência concetuais claramente definidos, mas não dependente de um quadro de referência teórico ou de um modelo de Enfermagem em particular*; 4) *Baseada num núcleo central ao qual se podem fazer adições através de um processo continuado de desenvolvimento e refinamento*; 5) *Sensível à variabilidade cultural*; 6) *O reflexo do sistema de valores comum da Enfermagem em todo o mundo*; 7) *Utilizável de forma complementar ou integrada com a família de classificações desenvolvida pela Organização Mundial da Saúde, cujo núcleo é a Classificação Internacional de Doenças (ICN 2016, p. 15).*

Para além da CIPE®, A Classificação dos Diagnósticos de Enfermagem da NANDA, a Classificação das Intervenções de Enfermagem (*Nursing Interventions Classification – NIC*) e a Classificação dos Resultados de Enfermagem (*Nursing Outcomes Classification – NOC*) constituem instrumentos importantes no fornecimento de nomenclaturas codificadas e padronizadas referentes ao processo de Enfermagem, abarcando os elementos que o constituem: Diagnósticos – Intervenções – Resultados. A combinação destas três classificações tem o potencial de representar o domínio da Enfermagem nas mais variadas áreas (Nanda Internacional 2015; Buleck et al. 2010; Moorhead 2010; Johnson et al. 2012). Um estudo realizado por Müller-Staub e colaboradores (2007) concluiu que a utilização da NANDA, da NIC e da NOC para a definição dos diagnósticos, das intervenções e dos resultados de Enfermagem levou a um aumento da qualidade da sua documentação, contribuindo para uma maior sustentação teórica dos mesmos e promovendo a integridade referencial. Escalada-Hernández e colaboradores (2015) salientam a escassez de estudos que examinem a prevalência de diagnósticos de Enfermagem de Saúde Mental de acordo com diferentes diagnósticos psiquiátricos e concluem que a análise da prática de Enfermagem de Saúde Mental à luz dos pressupostos estabelecidos por Classificações como a NANDA, a NIC e a NOC pode contribuir para o desenvolvimento de conhecimentos e para a tomada de decisão no âmbito desta especialidade.

Considerando os domínios definidos pela Nanda International (2015) para a análise dos diagnósticos de Enfermagem, é possível verificar que três deles se relacionam intimamente com a Enfermagem de Saúde Mental: o domínio da percepção / cognição, que nos remete para as áreas da atenção, da orientação, da cognição (confusão, memória) e da comunicação; o domínio da auto percepção, que aborda o autoconceito, a autoestima e a imagem corporal e o domínio do enfrentamento / tolerância ao *stress*, no qual se inserem as classes das respostas pós-trauma, das respostas de enfrentamento (ansiedade, medo, pesar, tristeza, humor) e do *stress* neurocomportamental. O domínio segurança / proteção, não abordando exclusivamente os processos mentais, remete-nos para as questões da automutilação, do risco de suicídio, da auto e da heteroagressão. Para cada diagnóstico, inserido em cada um dos domínios, é estabelecida uma definição e são apontadas as características definidoras e os fatores relacionados.

Numa fase posterior do processo de Enfermagem, a NIC identifica várias intervenções de Enfermagem no âmbito da saúde mental, nomeadamente nos domínios do controlo de alucinações, da redução da ansiedade, da melhoria da autoestima, da estimulação cognitiva, do controlo de ideias delirantes e do delírio, do controlo da demência, do tratamento no âmbito do uso de drogas e do uso de álcool, do controlo do humor, da melhoria da imagem corporal, do treino da memória, da prevenção do suicídio, entre outros (Bulecket et al. 2010).

Finalmente, também a NOC identifica vários indicadores de resultado no âmbito da Enfermagem de Saúde Mental, nomeadamente nos domínios do autocontrolo da ansiedade, da depressão, da agressividade, do comportamento compulsivo, do medo e do pensamento distorcido, da autoestima, do equilíbrio do humor, da imagem corporal, da memória; da vontade de viver, entre outros (Moorhead et al. 2010).

#### **4.1. Sistemas de Informação em Enfermagem**

Florence Nightingale foi pioneira ao enfatizar a importância da documentação dos cuidados de Enfermagem e, desde então, esta área tem merecido uma atenção crescente. Os registos de Enfermagem têm como finalidades o apoio no processo de tomada de decisão, partindo da utilização de uma linguagem comum, a partilha de informação, a consequente promoção da continuidade dos cuidados, a avaliação da sua qualidade e a produção de estatísticas e de indicadores (Pereira et al. 2011; Cheevakasemsook et al. 2006).

O modo como os enfermeiros registam os cuidados desenvolveu-se exponencialmente, a par da evolução tecnológica marcada que a última década presenciou. Dos registos em

suporte papel aos registos em suporte eletrónico, da informatização dos registos aos Sistemas de Informação em Enfermagem (SIE), dos sistemas de documentação aos sistemas inteligentes de apoio à decisão (Pereira et al. 2011).

Como preconiza a Ordem dos Enfermeiros (2002, p. 18), a excelência do exercício profissional exige *a existência de um sistema de registos de enfermagem que incorpore sistematicamente, entre outros dados, as necessidades de cuidados de enfermagem do cliente, as intervenções de enfermagem e os resultados sensíveis às intervenções de enfermagem obtidos pelo cliente*. Atualmente, em Portugal, a decisão clínica dos enfermeiros (relativa, quer à identificação das necessidades de cuidados – diagnósticos de Enfermagem – quer às intervenções de Enfermagem prescritas para lhes dar resposta) é documentada e partilhada através dos SIE em uso. Partindo do princípio de que a informação é uma componente central na tomada de decisão, a Ordem dos Enfermeiros (2007) salientou a crescente importância e emergência da informatização dos serviços de saúde. Os SIE, integrados no Serviço Nacional de Saúde (SNS), assumem-se como uma ferramenta central na gestão da informação e na produção de conhecimento.

Os SIE são sistemas informáticos que permitem colher, editar, guardar, relacionar, mostrar e comunicar dados para gerir os serviços, os recursos e a prática de Enfermagem, melhorando os cuidados aos doentes e promovendo uma prática avançada (Kim 2006). Inicialmente concebidos como a “Informática de Enfermagem” (Hannah, 1985 cit. por Hannah et al. 2009), os SIE constituem um avanço significativo, estabelecendo-se como um instrumento de importância fulcral para uma melhor prestação de cuidados e para a promoção da segurança, da qualidade e da continuidade dos mesmos. Como salientam Paiva e colaboradores (2014, p. 7), *percebeu-se que a introdução de SIE em suporte eletrónico se configurava, antes de mais, como uma oportunidade para tornar os cuidados de enfermagem mais significativos para os cidadãos por via da reflexão sobre as práticas profissionais (...)*.

Portugal está na vanguarda no que diz respeito à utilização de tecnologias de saúde na Europa (European Observatory on Health Systems and Policies 2018). A área dos SIE tem assumido particular relevância na Escola Superior de Enfermagem do Porto (ESEP), que se tem dedicado especialmente ao seu estudo e ao seu desenvolvimento. O trabalho desenvolvido pela ESEP nesta área veio mesmo a ser premiado pelo Ministério da Saúde com a medalha de serviços distintos – grau ouro – em 2010 (Paiva et al. 2014). A nível internacional, a ESEP constituiu o Centro de Investigação e Desenvolvimento dos Sistemas de Informação (CIDESI), acreditado pelo Conselho Internacional de Enfermeiros, que tem como missão melhorar a qualidade do ensino e dos cuidados de Enfermagem através da investigação e do desenvolvimento de SIE e do suporte ao desenvolvimento da CIPE®. Em

2014, Paiva e colaboradores publicaram o documento *Análise da parametrização nacional do Sistema de Apoio à Prática de Enfermagem – SAPE*, no qual é apresentado o resultado da análise de conteúdo às parametrizações nacionais do Sistema de Apoio à Prática de Enfermagem (SAPE®), tendo em vista propor enunciados de diagnósticos e de intervenções de Enfermagem unificados, bem como uma estrutura de ligação entre ambos.

Um dos conceitos centrais associado ao conteúdo e à estruturação do modelo de SIE é o de integridade referencial entre diagnósticos, *status*, intervenções, dados da observação / vigilância e resultados (Ordem dos Enfermeiros 2007). A integridade referencial reporta-se à *relação adequada e portadora de sentido entre dados de diferentes campos de informação* (Silva 2006<sup>1</sup>, p. 103). O desenvolvimento e a implementação dos SIE em Portugal permitiram a adoção de soluções tecnológicas com modelos de dados capazes de operacionalizar uma terminologia comum e de garantir a integridade referencial entre os elementos da documentação produzida, centrando o debate em torno do exercício profissional autónomo dos enfermeiros.

Existe agora a necessidade de suportar, com recurso à investigação, e, em particular, à investigação com elevado nível de evidência, alguns princípios da conceção de cuidados em Enfermagem, de modo a que estes possam ser integrados nos SIE e se constituam, efetivamente, como facilitadores da ação dos enfermeiros na prática clínica.

O trabalho que se desenvolveu nesta investigação surgiu no contexto de todo o percurso já realizado pela ESEP e deriva da reflexão sobre a emergência da criação de Modelos Clínicos de Dados (MCD) – arquétipos – capazes de apoiar a decisão clínica dos enfermeiros de Saúde Mental e Psiquiatria.

## **4.2. Ontologia de Enfermagem e Modelos Clínicos de Dados em Enfermagem**

Como referem Paiva e colaboradores (2014), a introdução de SIE trouxe consigo a necessidade de utilizar taxonomias e ontologias de Enfermagem. Em 2012, a ESEP iniciou um projeto internacional, denominado atualmente de “NursingOntos – Ontologia de Enfermagem”, afiliado na Unidade de Investigação da Escola Superior de Enfermagem do Porto (UNIESEP) e integrado no CIDESI, que visa o desenvolvimento de uma Ontologia de Enfermagem e de MCD – arquétipos – que possam vir a funcionar no *backend* dos SIE. Este projeto tem como finalidade representar o conhecimento de Enfermagem numa Ontologia *multilingue*, em que se encontrem especificados os conceitos e as relações entre eles, e tem como modelo teórico de referência a Teoria das Transições de Meleis. O

presente trabalho de Doutorado encontra-se integrado neste projeto e a ele deve a definição das suas linhas metodológicas gerais e o seu planeamento.

O termo Ontologia é emprestado da filosofia, que a define como um relato sistemático da Existência. Para sistemas baseados no conhecimento, o que "existe" é exatamente o que pode ser representado. Uma Ontologia é uma especificação explícita de uma conceptualização, ou seja, uma representação formal do conhecimento (Gruber 1993).

Uma terminologia (como a CIPE<sup>®</sup>) é uma descrição de conceitos. Uma Ontologia utiliza a terminologia, mas não está limitada a ela, uma vez que acrescenta a relação entre os conceitos e tem, na sua base, um modelo de referência. Este modelo de referência determina o que integra e o que não integra a Ontologia e impede a existência de caos na incorporação de novos conceitos e na definição das suas relações.

Uma Ontologia é uma especificação de conceitos e das suas relações. Um Modelo Clínico de Dados (MCD) é um subconjunto da Ontologia (similaridade com o conceito de arquétipos). Os MCD surgem no âmbito dos sistemas de informação, enquanto modelos de especificação algorítmica. A Ontologia será constituída por todos os modelos de dados desenvolvidos que representem o conhecimento disciplinar.

Perante a crescente necessidade de os enfermeiros definirem e tornarem visível o contributo do seu exercício profissional, torna-se imperativa a identificação dos dados / da informação que espelhe a melhor evidência científica disciplinar e que potencie melhores decisões e, conseqüentemente, melhores práticas. Os MCD representam a formalização do conhecimento disciplinar em Enfermagem, ao especificarem os dados relevantes para o raciocínio diagnóstico, as sintaxes que melhor explanam esse raciocínio, as intervenções, bem como a base epistemológica do conhecimento formal que regula a relação entre estes elementos. A especificação de Modelos Clínicos de Dados organizada, a partir de um modelo de referência, por domínios dos focos de atenção dos enfermeiros constituirá uma Ontologia de Enfermagem.

Atualmente, o papel da informação em Enfermagem na governação em saúde é sobejamente reconhecido. No entanto, de acordo com a Ordem dos Enfermeiros (2007, p. 1), *a visibilidade dos cuidados de enfermagem nas estatísticas, nos indicadores e nos relatórios oficiais de saúde é, de algum modo, incipiente*. Esta realidade deve-se à ausência de dados de Enfermagem acessíveis e completos nos sistemas de informação, o que conduz à falsa percepção de que a contribuição da Enfermagem para a saúde das populações é pouco significativa. Como salientam Goossen e colaboradores (2010), é necessário um alto nível de uniformização na reunião da informação para que esta possa, posteriormente, ser utilizada, nomeadamente para a produção de indicadores de saúde

capazes de traduzir o contributo dos cuidados de Enfermagem para a saúde das populações.

Além da produção de indicadores passíveis de atenuar a baixa visibilidade dos cuidados de Enfermagem, outro dos desafios que se coloca atualmente reporta-se à possibilidade de diferentes sistemas e aplicações informáticos comunicarem entre si, trocando dados de uma forma rigorosa, fiável e consistente e utilizando a informação partilhada. Esta noção traduz o conceito de interoperabilidade (Iakovidis et al. 2007). A modelagem formal dos dados clínicos constitui-se como um dos caminhos mais promissores para a obtenção de indicadores de saúde e para o alcance da interoperabilidade semântica da informação em saúde (Garde et al. 2009). Neste sentido, acredita-se que a maior contribuição dos registos eletrónicos em saúde é a padronização dos SIE, através da definição de um conjunto de dados representado por arquétipos.

Designam-se por arquétipos modelos de dados altamente relacionados e clinicamente significativos, constituindo-se por partes de conhecimento que indicam como representar conceitos ou informação (Hovenga et al. 2005). De acordo com a International Organization for Standardization (ISO 2015), os MCD permitem a estruturação de toda a informação relacionada com um determinado conceito. Sousa (2012, p. 1) acrescenta que o desenvolvimento de um arquétipo torna possível a definição do *máximo conjunto de dados de um determinado conceito clínico, de forma a garantir uma universalidade na sua utilização*.

Estes modelos de dados permitem uma visão estruturada da informação em todos os sistemas em que ela é partilhada, uma vez que garantem a integridade semântica nas diferentes utilizações (registo, agregação e comparabilidade dos dados entre os diferentes sistemas de informação) e constituem a base para definir, discutir e apresentar, de uma forma intuitiva, os dados clínicos (Sousa 2012; Goossen et al. 2010; Garde et al. 2009). Os arquétipos possibilitam a representação do conhecimento pelos especialistas do domínio (Spigolon et al. 2012), neste caso específico, pelos enfermeiros, cabendo-lhes definir os modelos de dados que melhor servem as suas práticas e o seu desenvolvimento (Silva 2006<sup>1</sup>).

Os MCD em Enfermagem fornecem dados baseados em evidência que poderão contribuir para a troca de informação, para a tomada de decisão clínica, para a obtenção de registos de qualidade, para a investigação e para a melhoria da qualidade dos cuidados (Chow et al. 2015).

Como já foi referido, com a necessidade de uma afirmação progressiva da disciplina de Enfermagem, evoluiu-se de uma lógica meramente executiva para uma abordagem

centrada na tomada de decisão clínica dos enfermeiros (Silva 2011). Também o modo como os cuidados são documentados evoluiu neste sentido, pelo que a ênfase dedicada inicialmente à produção de provas documentais das ações realizadas foi transferida para a informação necessária para a tomada de decisão sustentada e efetiva. Neste seguimento, o desenvolvimento e a incorporação de arquétipos que representem os conceitos “core” da disciplina de Enfermagem, organizados e estruturados com base no conhecimento formal disponível, especificamente na área da Saúde Mental e Psiquiatria, suportarão os enfermeiros na tomada de melhores decisões, mais congruentes com as necessidades específicas de cada cliente.

#### **4.3.A Teoria das Transições de Meleis como modelo teórico de referência**

De acordo com Meleis e colaboradores (1994), a Enfermagem centra-se na facilitação do processo de transição dos indivíduos. Esta perspetiva de Enfermagem apresenta-nos um conceito fundamental, que importa aprofundar porque o assumimos como referencial nesta investigação: o conceito de Transição. Silva<sup>2</sup> (2006) preconiza que a resposta humana às transições representa o objeto de estudo da Enfermagem.

A transição é uma passagem ou um movimento de um estado, de uma condição ou de um lugar para outro (Meleis et al. 2000). Uma transição ocorre sempre que um acontecimento resulta numa mudança nas conceções acerca de si mesmo e do mundo e requer, desse modo, uma alteração correspondente dos comportamentos e das relações (Schlossberg 1981). Ao longo da vida, as pessoas vão experimentando, de forma contínua, mudanças e transições, o que se traduz no desenvolvimento de novas relações, de novos comportamentos e de novas perceções acerca de si mesmas. A complexidade inerente ao ciclo vital conduz a diversas transformações que nele se vão perpetuando. Schumacher e colaboradores (1999) enfatizam a ideia de que a uma transição está inerente um processo de mudança no qual o indivíduo experiencia alterações internas e externas, assim como na perceção que tem sobre o mundo que o rodeia.

De acordo com Meleis e colaboradores (2000), existem propriedades inerentes à transição, elementos que caracterizam o modo como cada pessoa vive uma situação de crise e de mudança. Neste âmbito, emergem conceitos como a consciencialização, que se reporta à perceção e ao reconhecimento, por parte da pessoa, de uma situação de mudança com repercussões específicas.

Meleis e colaboradores (2000) referem que o processo de transição pode, ainda, ser influenciado por diversas condições facilitadoras ou inibidoras. Para compreender as

experiências dos indivíduos durante a transição, é necessário descobrir os diversos condicionalismos que facilitam ou dificultam o progresso em direção a uma transição saudável. Existem dois tipos de condicionalismos: os internos ou pessoais, que se reportam aos fatores intrínsecos da pessoa, e os externos ou comunitários, relacionados com os processos familiares e com os recursos que a pessoa apresenta à sua disposição.

Os recursos internos compreendem as percepções pessoais e os significados que cada pessoa atribui aos acontecimentos que precipitam a transição, as atitudes e as crenças, o status socioeconómico e a preparação ou o conhecimento acerca do próprio processo de transição. A facilidade ou a dificuldade no processo de adaptação dependerá do equilíbrio entre as exigências associadas à transição e os recursos pessoais. Quanto aos recursos externos, estes incluem a comunidade e a sociedade (Meleis et al. 2000). Elementos externos facilitadores de uma transição saudável são, por exemplo, o apoio da família, a informação adquirida através dos profissionais de saúde e o contacto com pessoas que vivenciaram uma transição semelhante, de forma a esclarecer ou clarificar dúvidas (Meleis et al. 2000).

Um importante indicador de processo no domínio da transição, que nos indica se a pessoa se encontra no caminho da saúde ou no sentido de uma maior vulnerabilidade, é o “desenvolvimento de confiança e *coping*”. O conceito de *coping* é definido por Lazarus (1991) como esforços comportamentais e cognitivos, em mudança constante, que visam gerir exigências internas ou externas específicas, consideradas como excedendo os recursos pessoais da pessoa. A seleção das estratégias de *coping* a utilizar para dar resposta a uma determinada situação tem por base uma avaliação prévia que o indivíduo realiza sobre a situação em si, determinando o significado que lhe atribui.

As transições referem-se a todo o tipo de mudanças que ocorrem na vida das pessoas. Estas mudanças podem estar associadas ao processo de desenvolvimento da pessoa ao longo do ciclo de vida (transições desenvolvimentais), à necessidade de desempenho de um novo papel relacionado com a saúde (transições situacionais) ou a mudanças decorrentes de um processo de doença (transições de saúde doença). Como salienta Silva (2011, p. 27), *todas as transições se incluem no domínio de enfermagem, pois referem uma mudança no estado de saúde, no papel, no âmbito das relações, nas expectativas ou nas capacidades, e podem processar-se tanto a nível individual como familiar.*

O diagnóstico de uma doença mental ou uma alteração significativa nos processos mentais pode resultar na vivência de uma transição, exigindo do indivíduo a implementação de um conjunto de estratégias que o apoiem na adaptação à nova condição. É com esta visão

que a Teoria das Transições de Meleis se vislumbra como o quadro conceptual de referência deste trabalho.

Como salienta a Ordem dos Enfermeiros (2010, p. 1), a Enfermagem de Saúde Mental foca-se *na promoção da saúde, na prevenção, no diagnóstico e na intervenção perante respostas humanas desadaptadas aos processos de transição, geradores de sofrimento, alteração ou doença mental*. Os diagnósticos de 'Delírio' e de 'Alucinação' podem despoletar uma destas respostas, levando o indivíduo a vivenciar uma transição saúde doença, na qual o enfermeiro desempenhará um papel crucial. As mudanças decorrentes da doença mental, que podem surgir de uma forma abrupta ou gradualmente, geram instabilidade e vulnerabilidade, esperando-se que a ação profissional de Enfermagem apoie o indivíduo na aquisição de competências que lhe permitam alcançar novamente a estabilidade. É neste sentido que o conceito de Transição se assume como um dos focos centrais da disciplina de Enfermagem (Chick et al. 1986; Meleis et al. 1994; Schumacher et al. 1999; Meleis et al. 2000; Meleis 2007; Meleis 2010).

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## **Finalidade e Objetivos**

### **Finalidade:**

Formalizar o conhecimento atualmente disponível no âmbito dos focos de atenção 'Delírio' e 'Alucinação', representando-o sob a forma de Modelos Clínicos de Dados (MCD) passíveis de integrar uma Ontologia de Enfermagem. Esta representação formal do conhecimento é relevante para o ensino, para a investigação e para a gestão dos cuidados, quer ao nível da assistência à pessoa, quer ao nível da tomada de decisões de níveis superiores baseadas em agregações de dados nos sistemas de informação. Assim, espera-se que a presente investigação contribua para a melhoria dos cuidados de Enfermagem nestas áreas.

### **Objetivo geral:**

- ✓ Desenvolver Modelos Clínicos de Dados no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação'.

### **Objetivos específicos:**

- ✓ Identificar os dados com utilidade clínica no âmbito dos focos de atenção 'Delírio' e 'Alucinação';
- ✓ Identificar os diagnósticos de Enfermagem que tomam como foco de atenção o 'Delírio' e a 'Alucinação';
- ✓ Identificar as intervenções de Enfermagem relacionadas com os diagnósticos que tomam como foco de atenção o 'Delírio' e a 'Alucinação';
- ✓ Analisar as relações entre os itens de informação anteriores – Dados / Diagnósticos / Intervenções.

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## Método

No sentido de alcançar os objetivos delineados, esta investigação comportou quatro estudos. Os estudos 1 e 2 constituem a primeira fase da investigação. O estudo 1 centrou-se na análise de conteúdo à parametrização nacional do Sistema de Informação de Enfermagem em uso nos serviços de psiquiatria do Serviço Nacional de Saúde (SNS). O segundo estudo consistiu na realização de um *focus group*, constituído por catorze peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem, com o objetivo de obter contributos para a análise de conteúdo realizada. Destes estudos, resultaram dois artigos – o Artigo 1, intitulado de “Content analysis of nursing diagnoses in mental health records in Portugal”, que foi aceite na revista *International Nursing Review* no dia 19.08.2018 (Gonçalves et al. 2018), e o Artigo 2, intitulado de “Nursing interventions in mental health and psychiatry: Content analysis of records from the nursing information systems in use in Portugal”, que foi aceite na revista *Journal of Psychiatric and Mental Health Nursing* no dia 11.06.2019 (Gonçalves et al. 2019<sup>1</sup>).

Importa referir que esta primeira fase da investigação precedeu o processo de construção dos Modelos clínicos de dados centrados no delírio e na alucinação. Aliás, nesta primeira fase, os focos de Enfermagem que viriam a ser a base de todo o trabalho subsequente ainda não estavam definidos. Foi após a primeira fase da investigação que os focos de Enfermagem ‘Delírio’ e ‘Alucinação’ foram selecionados.

O terceiro estudo, que constitui a segunda fase da investigação, consistiu na realização de duas *scoping reviews*, com o objetivo de identificar a evidência científica disponível relativamente aos dados necessários para o processo de diagnóstico, aos diagnósticos e às intervenções de Enfermagem no âmbito dos focos de atenção ‘Delírio’ e ‘Alucinação’. Deste estudo, resultaram dois artigos – o Artigo 3, intitulado de “Data, diagnoses, and interventions addressing the nursing focus “delusion”: A scoping review”, que foi aceite na revista *Perspectives in Psychiatric Care* no dia 05.05.2019 (Gonçalves et al. 2019<sup>2</sup>), e o Artigo 4, intitulado de “Nursing Process Addressing the Nursing Focus “Hallucination”: A Scoping Review”, que foi aceite na revista *Clinical Nursing Research* no dia 24.08.2019 (Gonçalves et al. 2019<sup>3</sup>).

O último estudo, que constitui a terceira fase da investigação, consistiu na realização de dois *focus groups*, um composto por onze peritos na área da representação do

conhecimento de Enfermagem numa Ontologia de Enfermagem (já envolvidos no segundo estudo) e outro composto por oito peritos na área da Enfermagem de Saúde Mental e Psiquiatria, com o objetivo de sistematizar os achados do estudo anterior em Modelos Clínicos de Dados no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação'. Deste estudo, resultou o Artigo 5 desta investigação, intitulado de "Building nursing clinical data models addressing delusion and hallucination, having Meleis Transitions Theory as the theoretical reference model: A focus group study", que se encontra, atualmente, em processo de publicação.

A presente tese de Doutoramento segue uma estrutura de "tese no formato de artigos". Todos os artigos mencionados são apresentados após o presente capítulo.

Seguidamente, exploraremos a metodologia de cada uma das fases que esta investigação comportou. A figura 1 apresenta, esquematicamente, as fases metodológicas desta investigação.

### **Fase 1 / Estudos 1 e 2**

Numa primeira fase, foi realizada análise de conteúdo aos enunciados dos diagnósticos e das intervenções de Enfermagem no âmbito dos focos de Enfermagem potencialmente significativos para a conceção de cuidados em Saúde Mental e Psiquiatria, integrados nas customizações nacionais ativas no Sistema de Apoio à Prática de Enfermagem (SAPE®), em 2011, e no Sclínico, em 2015. Os autores selecionaram estes focos de Enfermagem de acordo com os seguintes critérios: focos de Enfermagem integrados no domínio dos processos psicológicos em geral; focos de Enfermagem integrados no domínio da cognição; focos de Enfermagem integrados no domínio das emoções; focos de Enfermagem integrados no domínio do comportamento.

No âmbito dos focos de Enfermagem selecionados, todos os enunciados de diagnóstico e de intervenção identificados pelos enfermeiros a exercerem funções em serviços de psiquiatria do SNS foram extraídos. Os dados foram recolhidos dos Sistemas de Informação entre junho e agosto de 2016, tendo por base os registos realizados em 39 hospitais do SNS. A seleção destes hospitais foi realizada de acordo com os seguintes critérios: Hospital do SNS com um serviço de Psiquiatria para doentes agudos / crónicos; Utilização do SAPE® ou do Sclínico como SIE.

O processo de análise de conteúdo teve por base os pressupostos de Bardin (2009), a CIPE®, versão 2015 (ICN 2016), como estrutura semântica que comporta os conceitos necessários para a descrição dos cuidados de Enfermagem, e o modelo de análise

proporcionado pela norma ISO 18104 (International Organization for Standardization 2014).

O material utilizado nesta primeira fase do estudo foi cedido pelo Centro de Investigação e Desenvolvimento dos Sistemas de Informação (CIDESI), para efeitos da investigação. O acesso a este material resultou da parceria realizada entre os Serviços Partilhados do Ministério da Saúde (SPMS) e a Escola Superior de Enfermagem do Porto (ESEP). Este material contemplou apenas os enunciados de diagnóstico e de intervenção identificados pelos enfermeiros nos seus contextos clínicos, não havendo particularização da informação sobre o cliente alvo do registo ou sobre o enfermeiro que o realizou. O material encontrava-se anonimizado e todos os pressupostos inerentes ao princípio de proteção de dados foram respeitados.

Corpus de análise:

- ✓ Diagnósticos de Enfermagem parametrizados pelos enfermeiros que integram, no foco ou no grupo de status, os conceitos referentes aos processos mentais / psicológicos definidos;
- ✓ Intervenções de Enfermagem parametrizadas, associadas a esses diagnósticos.

Questões de investigação:

- ✓ Quais os diagnósticos parametrizados pelos enfermeiros na área da Enfermagem de Saúde mental e Psiquiatria?
- ✓ Quais as intervenções de Enfermagem parametrizadas pelos enfermeiros para dar respostas às necessidades identificadas?

Com o objetivo de obter contributos para a análise de conteúdo realizada, foi realizado um *focus group* composto por peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem. Aos participantes, foram solicitados o consentimento informado e a autorização para a gravação da reunião após a explicação dos objetivos do estudo. Para além disso, assegurou-se a confidencialidade durante o tratamento dos dados e o acesso aos resultados do estudo aquando da sua publicação.

## Fase 2 / Estudo 3

Com base nos resultados da primeira fase, foram selecionadas as áreas de atenção alvo desta Investigação: os focos de Enfermagem 'Delírio' e 'Alucinação'.

Foram realizadas duas *scoping reviews*, uma referente ao 'Delírio' e outra referente à 'Alucinação', com recurso às bases de dados MEDLINE, CINAHL (via EBSCOhost), Web of Science e Scopus, pesquisando estudos publicados entre 2008 e 2018, com o objetivo de identificar a evidência científica disponível relativamente aos dados necessários para o processo de diagnóstico, aos diagnósticos e às intervenções de Enfermagem no âmbito daqueles dois focos de Enfermagem.

Questões de investigação da *scoping review* referente ao foco de Enfermagem 'Delírio':

- ✓ Quais os dados relevantes para o processo de diagnóstico referente ao foco de Enfermagem 'Delírio'?
- ✓ Quais os diagnósticos de Enfermagem relevantes no âmbito do foco de Enfermagem 'Delírio'?
- ✓ Quais as Intervenções de Enfermagem relevantes no âmbito do foco de Enfermagem 'Delírio'?

Questões de investigação da *scoping review* referente ao foco de Enfermagem 'Alucinação':

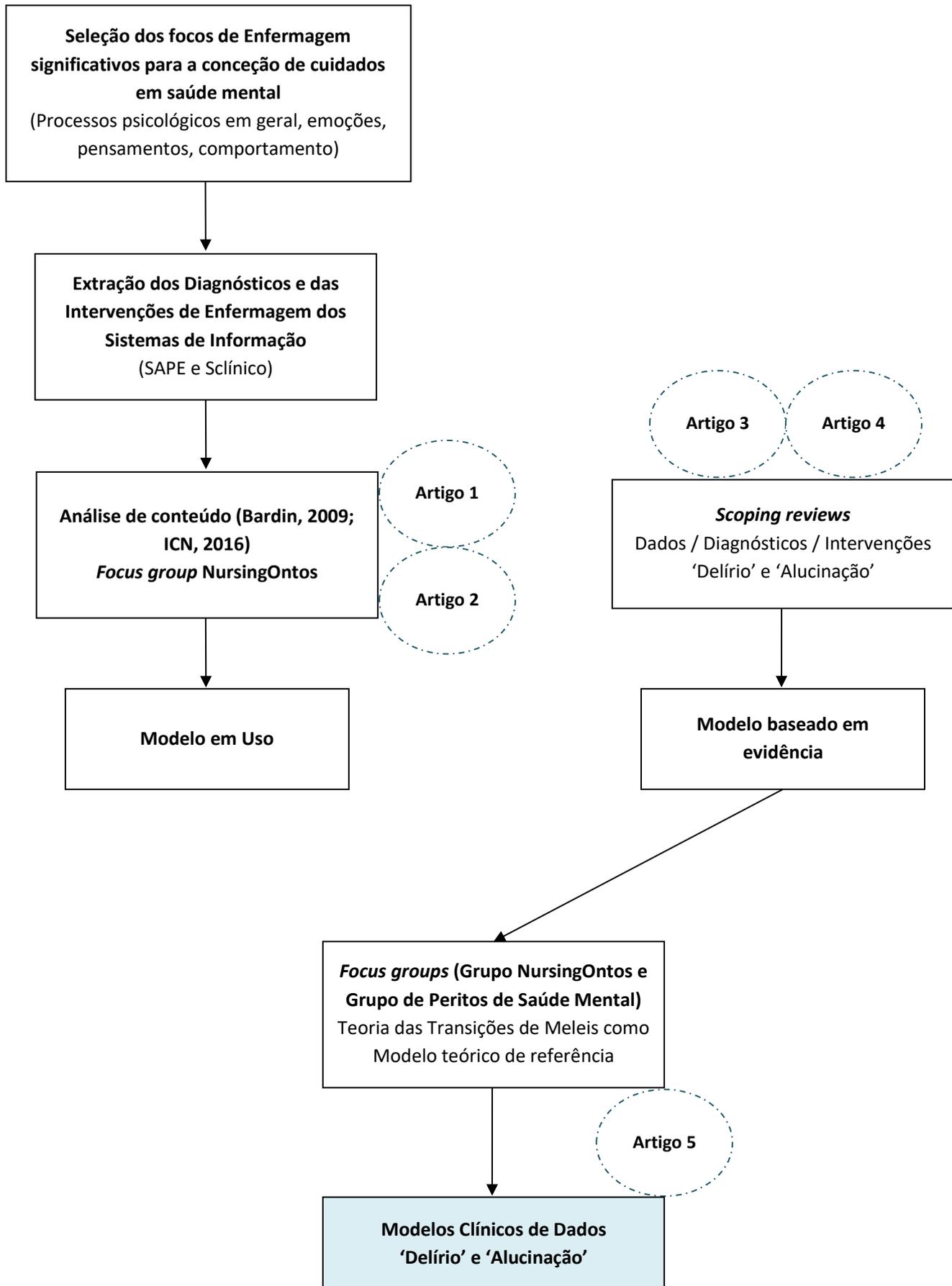
- ✓ Quais os dados relevantes para o processo de diagnóstico referente ao foco de Enfermagem 'Alucinação'?
- ✓ Quais os diagnósticos de Enfermagem relevantes no âmbito do foco de Enfermagem 'Alucinação'?
- ✓ Quais as Intervenções de Enfermagem relevantes no âmbito do foco de Enfermagem 'Alucinação'?

### Fase 3 / Estudo 4

Com o objetivo de sistematizar os achados do estudo anterior em Modelos Clínicos de Dados no âmbito dos focos de Enfermagem 'Delírio' e 'Alucinação', foram realizados dois *focus groups*, um composto por onze peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem (já envolvidos no segundo estudo) e outro composto por peritos na área da Enfermagem de Saúde Mental e Psiquiatria. Aos participantes, foram solicitados o consentimento informado e a autorização para a gravação da reunião após a explicação dos objetivos do estudo. Para além disso, assegurou-se a confidencialidade durante o tratamento dos dados e o acesso aos resultados do estudo aquando da sua publicação.

A realização deste último estudo permitiu a finalização dos MCD referentes aos focos de Enfermagem 'Delírio' e 'Alucinação'. Importa salientar que estes MCD têm como cliente a pessoa adulta com delírio e / ou alucinação, não englobando qualquer outro cliente alvo da ação do enfermeiro (como o cuidador ou a família) e que pretendem ilustrar o processo de conceção de cuidados autónomo do enfermeiro, não englobando qualquer intervenção de cariz interdependente.

Considerou-se relevante determinar os níveis de evidência associados a cada dado, diagnóstico e intervenção presentes nos MCD, provenientes da literatura analisada. Para tal, regressámos aos artigos que deram origem a cada dado, diagnóstico e intervenção e determinámos o seu nível de evidência, de acordo com os pressupostos do Instituto Joanna Briggs (Joanna Briggs Institute, JBI) (Joanna Briggs Institute 2013). Após a apresentação dos artigos que resultaram desta investigação, serão apresentados os MCD com a especificação dos níveis de evidência dos itens provenientes da literatura (nos dados em que existe um nível de evidência) e com a indicação dos itens provenientes dos *focus groups* e do modelo teórico de referência: a Teoria das Transições de Meleis.



**Figura 1:** Esquema relativo às fases metodológicas da investigação

**Artigo 1:** “Content analysis of nursing diagnoses in mental health records in Portugal”

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# Content analysis of nursing diagnoses in mental health records in Portugal

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**Aims:** To identify the diagnoses documented by nurses in Portugal to describe the nursing needs within the scope of mental health nursing and the main problems in documenting these needs.

**Background/Introduction:** The diagnosis process is an essential step in nursing care planning. This process should be carried out by nurses in a rigorous and standardized manner, in order to ensure quality practices and to obtain indicators that can increase the visibility of nursing care.

**A descriptive study combining:** 1. quantitative content analysis of nursing diagnosis records written by nurses working in 39 psychiatry departments of the Portuguese National Health Service, and 2. An focus group meeting with 14 nurses exploring the results of first study phase. Qualitative and quantitative data were analysed by content analysis.

**Findings:** The 2014 initial diagnosis records were systematized into 78 final diagnostic categories, which may represent the most relevant diagnoses in the field of mental health nursing in Portugal. The main problems found in the diagnostic identification by nurses included lack of a standardized language; confusion between nursing diagnoses and focus areas and identification of incongruent clinical judgements.

**Discussion/Conclusion:** The changes observed in the fields of behaviour, emotions and psychological process correspond to the largest concentration of nursing diagnoses and challenges in Portugal. This study revealed the lack of standardized language used by nurses in defining diagnoses. The problems identified in the diagnoses documentation suggest that more training in this area is needed.

**Nursing Implications:** This study provides information on the most relevant diagnoses in the area of mental health nursing in Portugal and may offer an important contribution towards improving nursing informatics systems and care to patients by means of standardization of language used in diagnosis definitions.

**Implication for Nursing Policies:** The standardization of language used by mental health nurses may contribute towards producing health indicators that provides evidence to policymakers about the contribution made by nursing care towards improved population health.

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## Introduction

In view of the need to consolidate the status of the nursing profession, nursing progressed from a merely executive logic-based method to an approach centred on care planning and decision-making by nurses. The nursing process is a systematic and dynamic way of providing nursing care (Silva 2011). It is divided into five essential steps – initial evaluation, diagnosis, planning, implementation and final evaluation – which aim to help nurses address potential problems in a structured and rigorous way. The steps of the nursing process provide a systematic, rigorous and efficient method of organizing thought processes for effective clinical decision-making, focused on problem-solving and individualized nursing care (Ackley & Ladwig 2014; Almeida, et al. 2011; Doenges & Moorhouse 2010).

Nurses collect, analyse and interpret data, in order to issue a clinical opinion regarding people's health condition and, in this way, formulate a nursing diagnosis (Nanda International 2015). A nursing diagnosis is defined by the International Council of Nurses (ICN 2016) as a label given by a nurse to the decision about a phenomenon, which is the focus of nursing interventions. Nanda International (Nanda International 2015) defines a problem-based diagnosis as a clinical judgement regarding an undesirable human response to a health condition/life process that exists in a person, family, group, or community. The nursing diagnosis is composed of focus, diagnosis or key concept of diagnosis and descriptor or modifier – judgement (ICN 2016; Nanda-I 2015).

The Portuguese Nursing Council (2012) argued that decision-making for diagnostic identification is extremely relevant, given that the correct identification of care needs results in the prescription of appropriate interventions to detect potential problems or to solve/minimize real problems. Escalada-Hernández (2015) underscored the scarcity of studies that examine the prevalence of mental health nursing diagnoses according to the different psychiatric diagnoses. Nanda International (2015) also emphasized that priority nursing diagnoses should be identified.

Internationally, there is a growing interest in clarifying the contribution of nursing care towards general health and client recovery (Morris et al. 2014; Corry et al. 2013; Kautz et al. 2006). Goossen et al. (2010) emphasized the need for producing health indicators that can demonstrate the contribution of nursing care towards population health. Valid, rigorous records are essential in order to provide quality information,

in the sense that they describe nursing care in detail, corresponding to the ideal means of conveying their importance and in order to produce the referred indicators.

In this context, the question of standardized language used by nurses has become increasingly relevant. The literature acknowledges that the lack of a universal language providing an established definition and description of professional practice has compromised the development of nursing as a scientific discipline. As was underlined by Escalada-Hernández (2015) and Thoroddsen et al. (2010), the use of a common language to describe the elements involved in the nursing process promotes a systematic approach regarding client care and allows the description of nursing practices in a precise and rigorous manner, permitting the representation of nursing knowledge.

The creation of the International Classification for Nursing Practice (ICNP) can be considered as an essential step towards the adoption of more standardized language by nurses, particularly in terms of diagnosis definitions. At the time of its development, it sought to create an internationally useful classification to describe nursing practice. However, the manner in which this taxonomy is organised (any focuses can be combined together with any judgments) has led to the identification of several potential diagnoses for the same condition. This has resulted in an overly extensive proliferation of diagnoses, without clinical benefits. Therefore, it is important to analyse nursing records with reference to the different steps of the nursing process, specifically the diagnoses.

Other studies have already sought to identify nursing diagnoses documented by nurses in mental health and psychiatry, most of them focused on the NANDA-I classification and developed in other countries (Frauenfelder et al. 2016; Prokofieva et al. 2016; Frauenfelder et al. 2018). Antunes & Manso (2017) conducted a study in Portugal with the aim of identifying the most common mental health-related nursing diagnoses in a psychiatric emergency service. The authors concluded that the changes observed in the field of psychotic symptomatology represent the greatest concentration of diagnoses and nursing challenges in this area.

This study is more comprehensive, seeking to identify the diagnoses documented in inpatient psychiatry services throughout the country and to analyse the use of ICNP (classification used in Portuguese Nursing Informatics Systems) for the diagnostic definition. This study aimed to identify (1)

the diagnoses documented by nurses in the nursing informatics systems (NIS) in use in Portugal to describe the nursing needs within the scope of psychiatric and mental health nursing and (2) the main problems of nurses in identifying the nursing diagnoses that respond to needs within the scope of psychiatric and mental health nursing.

## Methods

### Design

Currently, in Portugal, clinical decisions by nurses (whether in relation to identifying needs for care, nursing diagnoses, or the nursing interventions proposed to respond to these needs) are documented and shared via the NIS. The field of NIS has assumed particular importance in Portugal, mainly in the Oporto Nursing School (Escola Superior de Enfermagem do Porto), which formed the Nursing Informatics Systems Research & Development Centre (Centro de Investigação e Desenvolvimento dos Sistemas de Informação em Enfermagem – CIDESI), accredited by the International Council of Nurses (ICN) in August, 2010. A mission of the ICN is to improve the quality in nursing care by means of research and development of NIS and provide support for the development of the ICNP. In 2013, the Portuguese Ministry of Health asked CIDESI to analyse nurses' records in the informatics systems currently in use, in order to develop a nationwide customization.

This study arose in the context of the work performed by Oporto Nursing School within the scope of the NIS and was carried out in three phases: (1) quantitative, exploratory and descriptive study, aiming to collect and compile all the nursing different diagnosis records identified by nurses working in psychiatry departments of the Portuguese National Health Service, in NIS in use in Portugal; (2) quantitative content analysis of nursing diagnosis records based on the *a priori* model of the International Classification for Nursing Practice – ICN, 2015 release (ICN 2016); (3) focus group, comprising 14 nursing professionals, conducted in order to obtain new contributions regarding the previous content analysis.

During the first phase, the authors selected the nursing focus areas that were potentially significant for conceiving mental health care, according to the following inclusion criteria: nursing focuses in the field of cognition; nursing focuses in the field of emotions; nursing focuses in the field of thought; nursing focuses in the field of behaviour; and nursing focuses in the field of psychological processes.

The material under examination for performing this study consisted in the nursing diagnoses integrated into national customized versions active in the NIS in use in the psychiatric

services of the Portuguese National Health Service (Nursing Practice Support System – SAPE, 2011 and *Sclínico*, 2015). The body of the analysis related to nursing diagnoses documented by nurses who integrated, in the focus or the support group, the concepts with regard to the defined mental/psychological processes.

### Phase 1 – Collection and compilation of all the nursing diagnosis records identified by the nurses in the psychiatry departments of the Portuguese National Health Service

Within the scope of the selected focus areas, all differentiated diagnosis records were collected, as identified by the nurses in the psychiatry inpatient departments for acute/chronic patients in the Portuguese NHS. Data were collected in 39 NHS hospitals between June and August 2016 and reported to the records created by nurses at those hospitals in 2011 and in 2015. The selection of hospitals was performed according to the following criteria: NHS hospital with a psychiatry inpatient department for acute or chronic patients; utilization of nursing practice support system (SAPE) or *Sclínico* as NIS (NIS with ICNP).

### Ethical considerations

Ethical approval of the project was granted by the Scientific Technical Council that is part of the Ethics Committee of the Oporto Nursing School, (no. 25/2016 of 06/27), in accordance with the principles of the Declaration of Helsinki and subsequent revisions (World Medical Association 2013).

When data were collected, only the diagnostic sentences were extracted for further analysis. There is no particularization of the information in the material analysed, and no data on the client or the nurse author of the records (name, age, gender, address or others) were identified. The data were anonymous, and all rights related to data protection were respected.

### Phase 2 – Content analysis

After identifying the diagnosis records, they underwent a quantitative content analysis (Bardin 2009), based on the ICNP – ICN, 2015 release (ICN 2016).

### Principles applied to the content analysis process

- ✓ Application of the ICNP structure, 2015 release (ICN 2016), in order to support the standardization of NIS parameterization;
- ✓ Data analysis in order to avoid conceptual redundancy between the parameterization structures;
- ✓ Data analysis in order to avoid ambiguity in the definition of diagnosis records.

### Content analysis process

The content analysis process began with an individual and detailed analysis of the diagnosis records identified by nurses in the psychiatry departments of the Portuguese National Health Service (NHS), placing them in standardized diagnosis categories, by means of systematic and objective procedures, according to the description of the contents of the information analysed (Bardin 2009). In this way, the aim was to eliminate the use of variable language when defining the same phenomenon. The starting point for achieving the intended aim was precisely the material contained in diagnosis records, collecting their contents, filtering them and only afterwards moving forwards to define the categories, ensuring, in this way, that they would be true to the records created by the nurses. The classification of the diagnosis records was based on specific criteria, defined throughout the analysis process and applied rigorously to all the subsequent information. During this process, diagnosis records were found which, according to certain criteria (specified below), were excluded and were not classified in terms of diagnosis.

### Criteria applied to the content analysis process

1 Diagnoses obtained from NIS using terminology equivalent to the terminology found in ICN (2016) were classified in the same manner.

Example: 'Agitation' in NIS, classified as 'Agitation' (ICN 2016).

2 Diagnoses obtained from NIS using language different to ICN (2016), but that correspond to the same condition, were classified according to the ICN (2016) terminology.

Example: 'Impaired social interaction' in NIS, classified as 'Impaired interactive behaviour' (ICN 2016).

3 Diagnoses taken from NIS excluded, based on the following criteria:

#### 3.1 Inexistence of problem

Considering the definition of nursing diagnosis endorsed by ICN (2016), this should report to a condition that constitutes the focus for intervention by the nurse. In this sense, diagnoses that did not constitute a problem were excluded

Example: 'Anxiety absent'.

#### 3.2 Incomplete/Too wide-ranging diagnosis

Some of the diagnosis records only provided the 'nursing focus', without indicating the reasoning; in other cases, the focus had not been narrowed down sufficiently and was too wide-ranging.

Example: 'Self-control Aggressiveness' – no judgement clarifying the diagnosis.

#### 3.3 Two distinct diagnoses

In some cases, two distinct diagnoses were placed on the same nursing record, without providing any criteria that would allow selecting one or the other.

Example: 'Dysphoric mood|Confusion'.

#### 3.4 Confusion between judgements

In some cases, two or more distinct lines of reasoning were associated with the same focus in the same diagnosis record, without providing any criteria that would allow selecting one or the other.

Example: 'Emotional well-being|Changed|Present|Yes, at a moderate level'.

#### 3.5 Incongruence between focus area and judgement

Some diagnosis reasoning/status were inappropriate in accordance with the focus they related to.

Example: 'Confusion|Depressive|Yes'.

#### 3.6 Inexistence of compatible terminology in ICN (2016)

Diagnostics taken from NIS that did not have compatible definition under ICN (2016).

Example: Dignity in death.

### Phase 3 – Focus group

The focus group conduction was based in the methodological guidelines provided in the literature by Krueger and Casey (2014).

On the 22 May 2017, a focus group meeting was held at Oporto Nursing School with the specialist group *NursingOntos* – 14 specialists in planning nursing care. The following inclusion criteria were applied: master degree or PhD in Nursing; members of the CIDESI group – accredited by ICN; prior training in the field of classified nursing language; present or past participation in research projects in the field of classified nursing language.

The focus group meeting possessed a leader and met for a 180-min session. We made use of a 'questioning route' composed of predetermined and sequenced questions. The focus groups' questions were as follows: (1) Should diagnoses addressed to other individuals, who are not the client (mother, father, caregiver, among others) be included? (2) Should diagnoses which are not specifically associated with the field of mental health and psychiatry be included? (3) Should any other analytical criteria be introduced?

The facilitator (PDBG) hosted the meeting, explained its aim, encouraged the exchange of ideas and conducted the registration and observation of group dynamics. For the purposes of qualitative analysis, discussions were recorded in an audio file after obtaining informed consent from all participants.

Data analysis was performed immediately after the focus group meeting until data saturation was obtained (after one focus group). Data were analysed thematically after transcription of the audiotapes. No software was used for data analysis.

## Findings

### Phase 1 – Collection and compilation of all the nursing diagnosis records identified by the nurses in the psychiatry departments of the Portuguese National Health Service

Out of all the focus areas specified in NIS and ICN (2016), 98 applicable to the field of mental health were selected – nursing focuses in the field of cognition, emotions, thought, behaviour and psychological processes.

Within the scope of the selected focus areas, 2014 differentiated records that correspond to 2014 differentiated diagnosis records make up the national customized versions the NIS. Table 1 presents the number of differentiated diagnosis records obtained according to the nursing focus area in question.

### Phase 2 and Phase 3 – Content Analysis and Focus group

The content analysis performed on these diagnosis records, considering the suppositions specified in the methodology, resulted in 253 analysis categories, corresponding to 253 nursing diagnoses. After the focus group meeting, the following criteria were added and later applied to all the material analysed:

- ✓ The analysis performed should be centred on the individual who is subject to the nursing diagnosis, for which reason any diagnosis directed at other subjects (caregiver, father, mother) should be excluded.

Example: The diagnosis ‘Role of caregiver impaired’ was excluded.

- ✓ Any diagnosis that is not clearly related to the field of mental health should be excluded.

Example: The diagnosis ‘Lack of knowledge regarding pregnancy’ was excluded.

- ✓ Any general diagnosis that is later specified in a clinically useful manner should be excluded (specification renders the general feature unusable).

Example: The diagnosis ‘Impaired learning’ was excluded, maintaining the diagnoses ‘Cognitive learning impaired’ and ‘Learning capacity Impaired’.

- ✓ When no data are provided that allows the seriousness associated with the diagnosis to be ascertained, then the level of seriousness should not be identified;

Example: The diagnosis ‘Moderate hypoactivity’ was excluded.

- ✓ Learning capacities should relate to any given activity in the field of psychomotricity, while cognitive learning should relate to the field of information.

Example: The diagnosis ‘Learning capacities regarding coping impaired’ was excluded.

After the focus group meeting, the material resulting from the content analysis was submitted to the additional criteria. From this process, 78 definitive diagnosis categories were obtained, which are presented in Table 2. The diagnoses associated with the focus areas ‘Knowledge’ and ‘Learning capacity’ were not identified as definitive categories, because we considered that these could be related to any one of the diagnoses indicated, for which reason they could be identified as secondary diagnoses (subjacent to the main diagnosis categories).

The main problems found in the diagnostic identification by nurses were as follows: lack of standardized language used by nurses in diagnosis definitions; confusion between nursing diagnoses and focus areas; confusion between judgements or identification of contradictory judgements, incongruence between the clinical judgement and the focus area, as well as the existence of two distinct diagnoses on the same nursing record.

## Discussion

The final diagnostic categories obtained by virtue of this study may correspond to the most relevant diagnoses identified in Portugal in the field of psychiatric and mental health nursing. According to the results of this study, mental health and psychiatric nurses in Portugal identify diagnoses in three main areas: Diagnoses that refer to Behavioural problems (Aggressive behaviour; Alcohol abuse; Bulimia, among others); Diagnoses that refer to Emotional problems or Negative emotions (Anxiety; Suffering; Loneliness, among others); Diagnoses that refer to Psychological processes (Delusion; Impaired Cognition; Impaired Coping, among others). These different areas demonstrate the complexity and diversity of nursing care in inpatient psychiatric settings.

One of the aspects that stood out throughout the entire content analysis related to the lack of standardized language used by nurses in diagnosis definitions, which results in the use of varied terminology to describe the same phenomenon – semantic dispersion without clinical utility. For example, the focus ‘Alcohol abuse’; 21 different diagnosis records in this field were classed in the same category – ‘Alcohol abuse’: ‘Alcohol use present’; ‘Altered alcohol use’; ‘Alcohol use impaired’; ‘Dysfunctional alcohol use’; ‘Inappropriate alcohol use’; ‘Excessive alcohol use’; ‘Alcohol use disturbed’; among others. In this way, we saw a redundancy in the variable

Table 1 Number of differentiated diagnosis records obtained according to the nursing focus area

Nursing focus	Number of different diagnoses by focus			Nursing focus	Number of different diagnoses by focus		
	SAPE	Scĺnico	Total		SAPE	Scĺnico	Total
Abuse	7		7	Volition	5	1	6
Child abuse	1		1	Management of therapeutic regime	213	13	226
Acceptance of health status	19	1	20	Hyperactivity	14		14
Adaptation	5	1	6	Hypoactivity	23		23
Adherence to therapeutic regime	72		72	Hostility	2	1	3
Agitation	34	3	37	Mood	51	2	53
Aggressive behaviour	30		30	Body image	23	2	25
Compulsive eating behaviour	1		1	Insecurity	10		10
Hallucination	82	2	84	Sexual interation	2	1	3
Spiritual distress	10		10	Social interation	39	3	42
Anxiety	53	3	56	Mourning	14	4	18
Learning	10		10	Fear	11	2	13
Cognitive learning	10		10	Memory	17		17
Skill learning	11	1	12	Short term memory	15	2	17
Self destructive behaviour	10	2	12	Long term memory	15	2	17
Self consciousness	1		1	Nervousness	1		1
Self control	67	1	68	Obsession	11	1	12
Aggressive behaviour self control	29	1	30	Orientation	42	4	46
Anxiety self control	28	2	30	Sexual role		1	1
Abusive behaviour self control	4		4	Caregiver role		7	7
Distorted thinking self control	9		9	Thinking	119		119
Impulse self control	33	1	34	Magic thinking	26		26
Fear self control	16	2	18	Perception	26		26
Self esteem	32	3	35	Personality	9		9
Self mutilation	12		12	Labile personality	3		3
Welfare	3		3	Despair	1		1
Emotional welfare	5		5	Precaution against abuse		1	1
Spiritual welfare	4		4	Preoccupation	4		4
Psychocological welfare	8		8	Information processing	2		2
Bulimia	5		5	Indecent exposure	3		3
Catatonia	8		8	Thinking process	26	2	28
Cognition		1	1	Trauma response	5		5
Compulsive behaviour	7	1	8	Recovery	11		11
Adherence behaviour	33	17	50	Relationship	12		12
Health Seeking Behaviour	2	4	6	Powerlessness	4		4
Concentration	2		2	Socialisation	3		3
Confusion	45	5	50	Suffering	9		9
Knowledge	87	3	90	Loneliness	5	1	6
Coping	29	2	31	Caregiver stress	36	3	39
Belief		1	1	Relocation stress	7		7
Health belief		1	1	Suicide	15		15
Religious belief		1	1	Attempted suicide	30		30
Cultural belief		1	1	Sadness	21	1	22
Impaired belief		1	1	Alcohol use	44	2	46
Denial	10		10	Drug use	45	1	46
Dignity in death		1	1	Substance use	6	3	9
Emotion	4		4	Tobacco use	21	2	23

Table 1 Continued

Nursing focus	Number of different diagnoses by focus			Nursing focus	Number of different diagnoses by focus		
	SAPE	Sclínico	Total		SAPE	Sclínico	Total
Hope	10		10	Violence	2	1	3
Euphoria	12	1	13	Will to live	25		25
Total	860	63	923	Total	1028	63	1091
Total: 2014							

concepts used in documenting the nursing diagnoses specified in NIS, which resulted in a very high number of different descriptions to express the same clinical condition.

Kautz et al. (2006) argued that the use of classified and standardized language will allow nursing care to be perceived, due to the outcomes/gains in health care that are affected by nursing intervention. Goossen et al. (2010) corroborated this idea, stating that a high level of uniformity is necessary when collecting information in order to enable its later use, in particular regarding the production of health indicators that can translate the contribution of nursing care towards population health. The production of nursing indicators and the subsequent visibility of nursing care can only be achieved if nurses adopt a common language.

In addition to producing indicators that are capable of mitigating the lack of visibility of nursing care, another challenge that currently exists relates to the possibility of different informatic systems and software communicating with each other, exchanging information on a rigorous, reliable and consistent manner, using the shared information. This notion corresponds to the concept of interoperability (Sinderen & Chapurlat 2015). As emphasized by Silva, A. et al. (2014), although 20 years ago NIS meant an opportunity to incorporate structured language systems, permitting reflexion on practices, we are faced today by a variety of nursing interventions and diagnosis records which, in practice, prevent the interoperability of the information generated by nurses regarding patient care records and the national production of indicators based on the information obtained through the professional activity of nurses.

In addition to the lack of a common language, certain problems in nurses' diagnosis definitions were identified, particularly a confusion between nursing diagnoses, focus area and data, confusion between judgements, identifying contradictory judgements, incongruence between the clinical judgement and the focus area, as well as the existence of two distinct diagnoses on the same nursing record. Furthermore, a significant number of diagnosis records did not constitute a

problem that was targeted for intervention by nurses. In these cases, it is not the integrity of the diagnostic formulation that is in question but, rather, its clinical utility. If there is no problem, there is no need to intervene, for which reason we cannot perceive any reason to identify that the problem is absent.

Identifying the major problems felt by nurses in diagnostic documentation is the first step towards overcoming them. The problems identified may suggest that more training for professional nurses and for nursing students in the field of ICNP language and diagnoses formulation is needed. In our opinion, the results obtained from this study are very relevant in international terms because they offer information for other countries that may allow them to avoid the same problems and to develop similar work, as well as to compare the final diagnoses obtained in Portugal with their own specific circumstances.

Despite the interesting results obtained by this study, it does bear some limitations. One of these limitations relates to the fact that the focuses to be included in the study and the criteria applied in the content analysis were defined exclusively by the research team. Such criteria might not correspond to those considered most relevant by nurses. Furthermore, the fact that the focus group met after the application of the criteria is in itself another limitation. The criteria could have been rendered consensual by using, for example, a Delphi study. The fact that the focus group only met during one session, although this might allow data saturation, does not allow potential variations in the opinion of the experts over time to be perceived. Finally, the lack of an external observer in the focus group corresponds to a limitation because this did not allow us to obtain data centred on the non-verbal communication of the participants nor on the subliminal messages.

### Conclusions and recommendations

The changes observed in the fields of behaviour, emotions and psychological process correspond to the largest

Table 2 Final diagnosis categories (+ICN Codes)

✓ Abuse (10045566)	✓ Compulsive behaviour (10004883)	✓ Hyperactivity (10009302)
✓ Alcohol abuse (10022234)	✓ Impaired health seeking behaviour (10022920)	✓ Hypoactivity (10009466)
✓ Drug abuse (10022425)	✓ Impaired interactive behaviour (10027430)	✓ Hostility (10009146)
✓ Substance abuse (10022268)	✓ Impaired sexual behaviour (10012901)	✓ Impaired mood (10012938+10036241)
✓ Tobacco abuse (10022247)	✓ Impaired concentration (10012938+10004910)	✓ Depressed mood (10005784)
✓ Agitation (10025705)	✓ Confusion (10023633)	✓ Disturbed body image (10001079)
✓ Hallucination (10022500)	✓ Severe confusion (10025877+10023633)	✓ Insecurity (10010311)
✓ Spiritual distress (10001652)	✓ Moderate confusion (10025865+10023633)	✓ Dysfunctional grief (10001183)
✓ Anxiety (10000477)	✓ Impaired awareness (10012938+10003083)	✓ Fear (10007738)
✓ Severe anxiety (10025877+10000477)	✓ Impaired impulse control (10012938+10035700)	✓ Impaired short term memory (10012938+10018078)
✓ Moderate anxiety (10025865+10000477)	✓ Impaired coping (10012938+10005208)	✓ Impaired long term memory (10012938+10011429)
✓ Impaired cognitive learning (10012938+10004492)	✓ Conflicting health belief (10022516)	✓ Nervousness (10013071)
✓ Impaired skill learning (10012938+10018225);	✓ Conflicting religious belief (10021757)	✓ Obsession (10013540)
✓ Low Self Control (10027469)	✓ Conflicting cultural belief (10022397)	✓ Impaired Spiritual Status (10023336)
✓ Low anxiety self control (10027469+10000477)	✓ Delusion (10005709)	✓ Impaired perception (10012815)
✓ Low aggressive behaviour self control (10027469+10002026)	✓ Delirium (10022091)	✓ Relationship problem (10035744)
✓ Low Self Esteem (10029507)	✓ Despair (10005811)	✓ Distorted thinking process (10000669)
✓ Low self esteem [severe degree] (10029507+10025877+10005663)	✓ Disorientation (10001235)	✓ Powerlessness (10001578)
✓ Low self esteem [moderate degree] (10029507+10025865+10005663)	✓ Hopelessness (10000742)	✓ Impaired socialisation (10001022)
✓ Self mutilation (10001623)	✓ Euphoria (10007050)	✓ Suicide (10019072)
✓ Bulimia (10003759)	✓ Indecent exposure (10009990)	✓ Attempted suicide (10002907)
✓ Impaired cognition (10022321)	✓ Low volition (10022867)	✓ Impaired recovery (10012938+10016507)
✓ Aggressive behaviour (10002026)	✓ Impaired adherence to therapeutic regime (10012938+10030205)	✓ Post trauma response (10001699)
✓ Compulsive eating behaviour (10004896)	✓ Impaired adherence to exercise regime (10012938+10030163)	✓ Suffering (10025588)
✓ Self destructive behaviour (10027424)	✓ Impaired adherence to medication regime (10012938+10030192)	✓ Loneliness (10011417)
		✓ Stress (10018888)
		✓ Sadness (10040662)
		✓ Impaired will to live (10012938+10021113)

concentration of nursing challenges and diagnoses in Portugal. The nursing diagnoses identified demonstrate the complexity and diversity of nursing care in inpatient psychiatric settings in Portugal.

This study confirmed the lack of standardized language used by nurses in diagnosis definitions, which results in the use of varied terminology to describe the same condition. Nowadays, the role of nursing information in health practice is widely recognized. However, the visibility of nursing care in statistical terms, in indicators and in official health reports is still somewhat incipient (Portuguese Nursing Council 2007). This situation is due to the absence of structured and standardized nursing data in informatics systems, which may lead to the false perception that the contribution of nurses to population health is not significant. As Silva (2006) emphasizes, we only communicate through language if we all attribute the same meanings to the same signifiers. The use of a

common language by professional nurses is an essential requirement in order to build structured and formal knowledge in nursing.

This study aims to provide an important contribution towards the standardization of language used by mental health and psychiatric nurses in diagnosis definitions, which may contribute towards improving NIS and producing health indicators that can convey the contribution of nursing care towards population health.

Based on the results of this study, more training in the field of ICNP language and diagnoses formulation is needed. This training should be addressed to nursing students and to nursing professionals. Also, NIS should be subject to greater investment and reformulation, in particular by limiting diagnostic possibilities for nurses. We recommend that further investigations should be carried out in Portugal and in other countries, analysing not only nursing diagnosis records, but

also records within the scope of the other nursing process steps.

### Implications for nursing practice

Nursing records have the purpose of supporting the decision-making process, sharing information and promoting continuity of care, assessing care quality and producing statistics and indicators (Pereira et al. 2011). This study aims to provide information on the most relevant diagnoses in the field of psychiatric and mental health nursing. Besides, it may constitute an important contribution towards the standardization of language used by psychiatric and mental health nurses in diagnosis definitions, which may improve the nursing records within NIS and, therefore, make a significant impact on the quality of nursing care.

### Implications for nursing policy and health policy

Nurses' expertise is needed at every level of health care. However, in many parts of the world, accurate data on nursing resources and nursing care are not sufficient to support evidence-based practice, management or policy development (ICN 2016).

Internationally, there is a growing interest in clarifying the contribution of nursing care towards general health and client recovery (Morris et al. 2014; Corry et al. 2013; Kautz et al. 2006). This study aims to provide an important contribution towards the standardization of language used by psychiatric and mental health nurses in diagnoses definitions, which may contribute towards producing health indicators that show policymakers the contribution and importance of nursing care towards population health. Therefore, a stronger investment in the field of nursing by political stakeholders may be achieved, particularly through adjustment of nurse-patient ratios.

### Author contributions

Study design: PDBG, CACS, MATCPS

Data collection: PDBG, CACS, MATCPS

Data analysis: PDBG

Study supervision: CACS, MATCPS

Manuscript writing: PDBG

Critical revisions for important intellectual content: PDBG, CACS, MATCPS

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**Artigo 2:** “Nursing interventions in mental health and psychiatry: Content analysis of records from the nursing information systems in use in Portugal”

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# Nursing interventions in mental health and psychiatry: Content analysis of records from the nursing information systems in use in Portugal

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## Accessible summary

### What is known about the subject?:

- Planning and implementation of care are based on the selection and application of nursing interventions, which correspond to a key element in the nursing process.
- No information was found in the literature about which major nursing interventions are documented by nurses working in psychiatric wards.

### What the paper adds to existing knowledge?:

- Despite the criteria applied to the intervention records' analysis may have led to the exclusion of certain important aspects of mental health nursing, this study provides information on some of the most relevant interventions in the field of psychiatric and mental health nursing documented in Portugal, placing them into the different steps of the nursing process.
- This study revealed the lack of standardized language used by nurses in intervention definitions, which results in the use of varied terminology to describe the same intervention.

### What are the implications for practice?:

- This study constitutes an important contribution towards the standardization of language used by mental health nurses in intervention definitions, which may lead to the production of health indicators that will show policymakers the importance of nursing care towards population health.
- This study also contributes to the improvement of nursing informatics systems in use in psychiatric departments, particularly through the differentiation between different types of intervention, placing them into the proper steps of the nursing process. The problems identified in this study regarding nursing documentation may suggest that more training for professional nurses in the field of intervention formulation is needed.

## Abstract

**Introduction:** The nursing intervention corresponds to a key element in the nursing process. No information was found in the literature about which major interventions are documented by nurses working in psychiatric wards.

**Aims:** (a) To identify the interventions documented by nurses in Portugal that respond to nursing needs within the scope of psychiatric nursing; (b) to identify the main problems in identifying these interventions.

**Method:** A descriptive study combining: (a) quantitative content analysis of intervention records identified by mental health nurses in Portugal and (b) a focus group meeting with 14 nurses exploring the results of the first study phase.

**Results:** The 2,881 initial intervention records were systematized into 198 intervention categories. Some problems in the interventions' documentation by nurses were identified.

**Discussion:** Despite certain important aspects of mental health nursing may have been excluded, this study provides information on some of the most relevant interventions in the field of mental health nursing documented in Portugal.

**Implications for practice:** This study may offer an important contribution to the improvement of nursing informatics systems and the production of health indicators that reveal the contribution of nursing care towards population health.

#### KEYWORDS

content analysis, nursing informatics, nursing intervention, nursing process, psychiatric nursing

## 1 | INTRODUCTION

Despite the recognized importance of the nursing process regarding the quality of care, the evidence found in the literature on its application in mental health is limited (Garcia, Freitas, Lamas, & Toledo, 2017). Mental health nursing concerns diagnosis and intervention in relation to unbalanced or inappropriate responses to transition processes (Portuguese Nursing Council, 2010). Planning and implementation of care are based on the selection and application of nursing interventions, which correspond to a key element in the nursing process (Ackley & Ladwig, 2014; Doenges & Moorhouse, 2010). Nursing intervention is defined by the ICN (2016) as an action taken in response to a nursing diagnosis, in order to achieve a nursing outcome. Nursing interventions indicate behaviours, treatments, activities or actions that help the client to achieve the expected outcomes (Doenges & Moorhouse, 2010).

Internationally, there is a growing interest in clarifying the contribution of nursing care towards general health and client recovery (Corry, Clarke, While, & Lalor, 2013; Kautz, Kuiper, Pesut, & Williams, 2006; Morris, Matthews, & Scott, 2014). Kilbourne et al. (2018, p. 30) state that "measurement-based care should become part of the overall culture of the mental health care system." However, according to Sim, Crookes, Walsh, and Halcomb (2018), no agreement has been reached within the nursing profession on how the quality of nursing care can be measured. Goossen, Goossen-Baremans, and Zel (2010) emphasize the need for producing health indicators that can demonstrate the contribution of nursing care towards population health. Valid, rigorous records are essential in order to provide quality information. They describe nursing care in detail and are crucial for the production of the referred indicators.

The use of a common language to describe the elements involved in the nursing process promotes a systematic approach regarding the client care and allows the description of nursing practices in a precise and rigorous manner, which contributes to the production of health indicators that can reveal the contribution of nursing care towards population health (Escalada-Hernández et al. 2015, Thoroddsen, Ehnfors, Nurs Ed, & Ehrenberg, 2010, Goossen et al., 2010). Saranto et al. (2014) state that the value of standardized nursing language is proven by virtue of its support to daily workflow, the delivery of nursing care, data reuse and fluent data exchange in and between clinical settings, which facilitates the continuity of care and thus contributes to patient safety and high-quality care.

The Nursing Interventions Classification is a key instrument for the creation of a codified and standardized nomenclature with reference to nursing interventions (Butcher, Dochterman, Bulechek, & Wagner, 2018). A study performed by Müller-Staub, Needham, Odenbreit, Lavin, and Van Achterberg (2007) concluded that the use of NANDA, Nursing Interventions Classification and Nursing Outcomes Classification for the definition of nursing diagnostics, interventions and outcomes led to an increase in the quality of its documentation, contributing towards their greater theoretical support and promoting referential integrity, which corresponds to the adequate and meaningful relationship between data from different information fields. (Silva, 2006).

Additionally, the International Classification for Nursing Practice (ICNP<sup>®</sup>), from the International Council of Nurses, is a consensus-based terminology that represents nursing diagnoses and interventions (ICN, 2016). It is the only nursing taxonomy included in the World Health Organization Family of International

Classifications (Sequeira & Sampaio, 2018). Therefore, its creation has become an essential step towards the adoption of a more standardized language by nurses, particularly in terms of defining nursing interventions.

Currently, in Portugal, clinical decisions by nurses are documented and shared via nursing informatics systems (electronic systems). This study is a continuation of the work initially performed by Gonçalves, Sequeira, and Silva (2018), which consisted in the analysis of mental health and psychiatric nursing diagnosis records. This time, the aim was to analyse interventions documented by nurses working in mental health and psychiatry services.

Other studies have already been developed in order to identify nursing interventions in the field of mental health and psychiatry. Bekhet et al. (2018) conducted a systematic review which summarizes characteristics of psychiatric and mental health intervention studies published from January 2011 to December 2015. They identified 115 intervention studies, and 92 of them focused on interventions to promote the well-being of clients. These 92 interventions were centred on three main domains: Biological domain, Psychological domain and Social domain. Frauenfelder, Müller-Staub, Needham, and Achterberg (2013) demonstrated that nursing care in adult inpatient psychiatry settings is based on well-defined tasks and activities included in the Nursing Interventions Classification. Frauenfelder, Achterberg, and Staub (2018), in their study performed in a Swiss centre for psychiatric rehabilitation, demonstrated that the Nursing Interventions Classification describes adult inpatient psychiatric care to a large extent. Despite the aforementioned studies, no information was found in the literature about which major nursing interventions are documented by nurses working in psychiatric wards. This article intends to find information with regard to this matter.

## 1.1 | Aims

This study aims to (a) identify the interventions used by nurses in the informatics systems in use in Portugal in order to respond to needs within the scope of mental health and psychiatric nursing; (b) identify the main problems/difficulties in identifying the nursing interventions that respond to needs within the scope of mental health and psychiatric nursing.

## 2 | METHODS

In terms of methodology, this study follows the same steps as Gonçalves et al. (2018) and was carried out in three phases: (a) quantitative, exploratory and descriptive study, aiming to collect and compile all the nursing different intervention records identified by nurses working in psychiatry departments of the Portuguese National Health Service, in nursing informatics systems in use in Portugal; (b) quantitative content analysis of nursing intervention records based on the a priori model of the International Classification for Nursing Practice—ICN, 2015 release (ICN, 2016); (c) focus group,

comprising 14 nursing professionals, conducted in order to obtain new contributions regarding the previous content analysis.

Since 2005, in Portugal, clinical decisions by nurses are documented and shared via the Ministry of Health's nursing information systems (electronic documentation). The field of nursing information systems has assumed particular importance in the Oporto Nursing School (Escola Superior de Enfermagem do Porto), which formed the Nursing Informatics Systems Research & Development Centre (Centro de Investigação e Desenvolvimento dos Sistemas de Informação em Enfermagem—CIDESI), accredited by the International Council of Nurses in August 2010. A mission of the ICN is to improve the quality in nursing care by means of research and development of nursing information systems. In 2013, the Portuguese Ministry of Health asked CIDESI to analyse nurses' records in the informatics systems currently in use, in order to develop a nationwide customization. The comprehensive analysis of all nursing intervention records in the field of mental health and psychiatry identified by nurses through all country' regions may effectively translate what nurses do.

During the first phase, the authors selected the nursing focus areas that were potentially significant for describing mental health care, according to the following inclusion criteria (The International Classification for Nursing Practice' structural hierarchy was followed): nursing focuses in the field of cognition; nursing focuses in the field of emotions; nursing focuses in the field of thought; nursing focuses in the field of behaviour; and nursing focuses in the field of psychological processes. The aim of this study was to analyse specific interventions in the field of mental health and psychiatry. With this purpose in mind and considering the wide range of nursing interventions identified in the information systems in Portugal, all the interventions that were not specifically associated with mental health and psychiatry were excluded, including those associated with physical health care. These interventions actually exist and are documented in digital records. However, it is a very long list, which was not integrated into this study because this would not serve its purpose.

Within the scope of the selected focus areas, all intervention records were collected, as identified by the nurses in the psychiatry inpatient departments for acute/chronic patients in the Portuguese NHS. Data were collected in 39 NHS hospitals between June and August 2016 and reported to the records created by nurses at those hospitals in 2011 and in 2015. The selection of hospitals was performed according to the following criteria: NHS hospital with a psychiatry inpatient department for acute or chronic patients; Utilization of Nursing Practice Support System (SAPE) or Sclínico as nursing informatics systems (nursing informatics systems with ICNP®).

## 2.1 | Content analysis

After identifying the intervention records, they underwent a quantitative content analysis (Bardin, 2009), based on the International Classification for Nursing Practice—ICN, 2015 release (ICN, 2016). The analysis performed was not based on a theoretical framework. Rather, we used the International Classification for Nursing Practice

rules for identifying a nursing intervention. This classification determines the minimum terms that an intervention must contain—label for “Action” axis plus terms from other axes, usually from the axis “Focus” or from the axis “Means” (Examples: Assessing anxiety (term from axis “Action” + term from axis “Focus”); Teaching memory technique (term from axis “Action” + term from axis “Means”); Implementing relaxation technique (term from axis “Action” + term from axis “Means”); etc.

Criteria applied to the content analysis process:

1. Interventions obtained from nursing informatics systems using terminology equivalent to the terminology found in ICN (2016) were classified in the same manner.  
Example: “Assessing Anxiety” in nursing informatics systems, classified as “Assessing Anxiety” (ICN, 2016).
2. Interventions obtained from nursing informatics systems using language different to ICN (2016), but that correspond to the same intervention, were classified according to the ICN (2016) terminology.  
Example: “Assessing social interaction” in nursing informatics systems classified as “Assessing interactive behaviour” (ICN, 2016).
3. Interventions taken from nursing informatics systems excluded, based on the following criteria:
  - 3.1. Incomplete or too wide-ranging interventions.  
Some statements of intervention presented only the type of action, without indicating another term that specifies the scope of the intervention to be performed. In other cases, the target of the intervention was poorly specified and too wide-ranging.  
Example: The intervention “Assessing” was excluded.
  - 3.2. Intervention statements containing ambiguous or incomprehensible/incongruent contents, which may lead to diverse or even contradictory interpretations.  
Example: The intervention “Managing environmental medication” was excluded.
  - 3.3. Interventions without clinical benefits.  
Example: The intervention “Encouraging self-control” was excluded.
  - 3.4. Intervention statements which do not represent nursing interventions.  
Example: The intervention “Managing telephone calls” was excluded.
  - 3.5. Inexistence of compatible terminology in ICN (2016)  
Interventions taken from nursing informatics systems that did not have a compatible definition under ICN (2016) were excluded.  
Example: The intervention “Implementing Help Relationship” was excluded.

## 2.2 | Focus group

The focus group was conducted in accordance with the methodological guidelines of Krueger and Casey (2014) and with the methodological structure followed by Gonçalves et al. (2018).

The focus group meeting was held at Oporto Nursing School with the specialist group *NursingOntos*—14 specialists in planning nursing care. The following inclusion criteria were applied in order to constitute the group: Masters or PhD in Nursing; members of the CIDESI group—accredited by ICN; prior training in the field of classified nursing language; present or past participation in research projects in the field of classified nursing language.

The focus group meeting (180-min session) included a leader (PDBG), who hosted the meeting, explained its aim, encouraged the exchange of ideas and conducted the registration and observation of group dynamics. A “questioning route” composed of predetermined and sequenced questions was followed. The focus group’s questions were as follows: (a) Should interventions addressed to other individuals, who are not the client (mother, father, caregiver and among others) be included? (b) Should interventions which are not specifically associated with the field of mental health and psychiatry be included? (c) Should any other analytical criteria be introduced?

For the purposes of qualitative analysis, discussions were recorded in an audio file after obtaining informed consent from all participants. Data analysis was performed immediately after the focus group meeting until data saturation was obtained (after one focus group). Data were analysed thematically after transcription of the audiotapes. No software was used for data analysis.

## 2.3 | Ethical considerations

Ethical approval of the project was granted by the Technical-Scientific Council that is part of the Ethics Committee of the Oporto Nursing School, as recorded in Annex I of Act no. 25 of 2016, with the number 25/2016 of 06/27, in accordance with the principles of the Declaration of Helsinki and subsequent revisions (World Medical Association, 2013). When data were collected, only the intervention sentences were extracted for further analysis. There is no particularization of the information in the material analysed, and no data on the client or the nurse author of the records (name, age, gender, address or others) were identified—records were not linked to individuals. The data were anonymous, and all rights related to data protection were respected.

## 3 | FINDINGS

Out of all the focus areas specified in nursing informatics systems and ICN (2016), 98 focus areas applicable to the field of mental health were selected—nursing focus areas in the field of cognition, emotions, thought, behaviour and psychological processes.

Within the scope of the selected focus areas, 2,881 differentiated records that correspond to 2,881 intervention records make up the national customized versions the nursing informatics systems. Table 1 presents the number of differentiated intervention records obtained according to the nursing focus area in question.

**TABLE 1** Number of intervention records obtained according to the nursing focus area

Nursing focus	Number of different interventions by focus			Nursing focus	Number of different interventions by focus		
	SAPE	Scínico	Total		SAPE	Scínico	Total
Abuse	6	0	6	Indecent exposure	0	0	0
Child abuse	2	0	2	Volition	51	9	60
Acceptance of health status	57	15	72	Management of therapeutic regime	182	95	277
Adaptation	20	14	34	Hyperactivity	24	0	24
Adherence to therapeutic regime	216	0	216	Hypoactivity	28	0	28
Agitation	169	21	190	Hostility	3	4	7
Aggressive behaviour	78	0	78	Mood	94	24	118
Compulsive eating behaviour	21	0	21	Body image	111	18	129
Hallucination	140	25	165	Insecurity	0	0	0
Spiritual distress	15	0	15	Sexual interaction	0	2	2
Anxiety	170	30	200	Social interaction	90	21	111
Learning	24	0	24	Mourning	128	21	149
Cognitive learning	13	0	13	Fear	103	5	108
Skill learning	31	6	37	Memory	31	0	31
Self-destructive behaviour	63	21	84	Short-term memory	28	10	38
Self-consciousness	6	0	6	Long-term memory	28	11	39
Self-control	58	2	60	Nervousness	6	0	6
Aggressive behaviour self-control	73	21	94	Obsession	65	18	83
Anxiety self-control	65	28	93	Orientation	27	8	35
Abusive behaviour self-control	21	0	21	Sexual role	0	2	2
Distorted thinking self-control	33	0	33	Caregiver role	0	101	101
Impulse self-control	39	17	56	Thinking	105	0	105
Fear self-control	82	23	105	Magic thinking	10	0	10
Self-esteem	127	25	152	Perception	50	0	50
Self-mutilation	28	0	28	Personality	23	0	23
Welfare	49	0	49	Labile personality	4	0	4

(Continues)

TABLE 1 (Continued)

Nursing focus	Number of different interventions by focus			Number of different interventions by focus		
	SAPE	Sclinico	Total	SAPE	Sclinico	Total
Emotional welfare	32	0	32	0	5	0
Spiritual welfare	33	0	33	0	3	3
Psychological welfare	27	0	27	11	0	11
Bulimia	36	0	36	0	0	0
Catatonia	15	0	15	84	19	103
Cognition	27	6	33	22	0	22
Compulsive behaviour	31	15	46	32	0	32
Adherence behaviour	39	60	99	26	0	26
Health seeking behaviour	0	26	26	23	0	23
Concentration	3	0	3	7	0	7
Confusion	114	51	165	48	0	48
Knowledge	389	11	400	27	11	38
Coping	85	7	92	143	27	170
Belief	0	4	4	18	0	18
Health belief	0	5	5	102	0	102
Religious belief	0	4	4	118	0	118
Cultural belief	0	4	4	87	23	110
Impaired belief	0	2	2	129	22	151
Denial	15	0	15	92	20	112
Dignity in death	0	4	4	31	25	56
Emotion	20	0	20	50	17	67
Hope	45	0	45	15	2	17
Euphoria	35	10	45	82	0	82
Subtotals	2,568	457	3,025	2,338	523	2,856
Total: 5,886						
Total of different interventions (after removing the replicated ones): 2,881						

The content analysis performed on these intervention records, considering the suppositions specified in the methodology, resulted in 1,301 analysis categories, corresponding to 1,301 nursing interventions. After the focus group meeting, the following criteria were added and later applied to all the material analysed:

The analysis performed should be centred on the individual who is subject to the nursing intervention, for which reason any intervention directed at other subjects (caregiver, father and mother) should be excluded.

Example: The intervention "Teaching caregiver about delusion" was excluded.

Any intervention that is not clearly related to the field of mental health should be excluded.

Example: The intervention "Teaching about wound care" was excluded.

Any intervention that refers to a "good practice"—a property inherent to the nurse professional practice—should be excluded.

Example: The intervention "Managing teaching in accordance with the client's limitations" was excluded—The nursing intervention that should be identified is "Teaching the client about...". Managing teaching in accordance with its limitations is implicit in this intervention, constituting a good nursing practice. Therefore, we believe it should not be subject to documentation.

Interventions that represent the intention underlying the conception of care, corresponding to a goal rather than an action, must be distinguished from the intervention categories (Action verbs: Promoting, Decreasing, Increasing, among others).

Example: "Decreasing Anxiety."

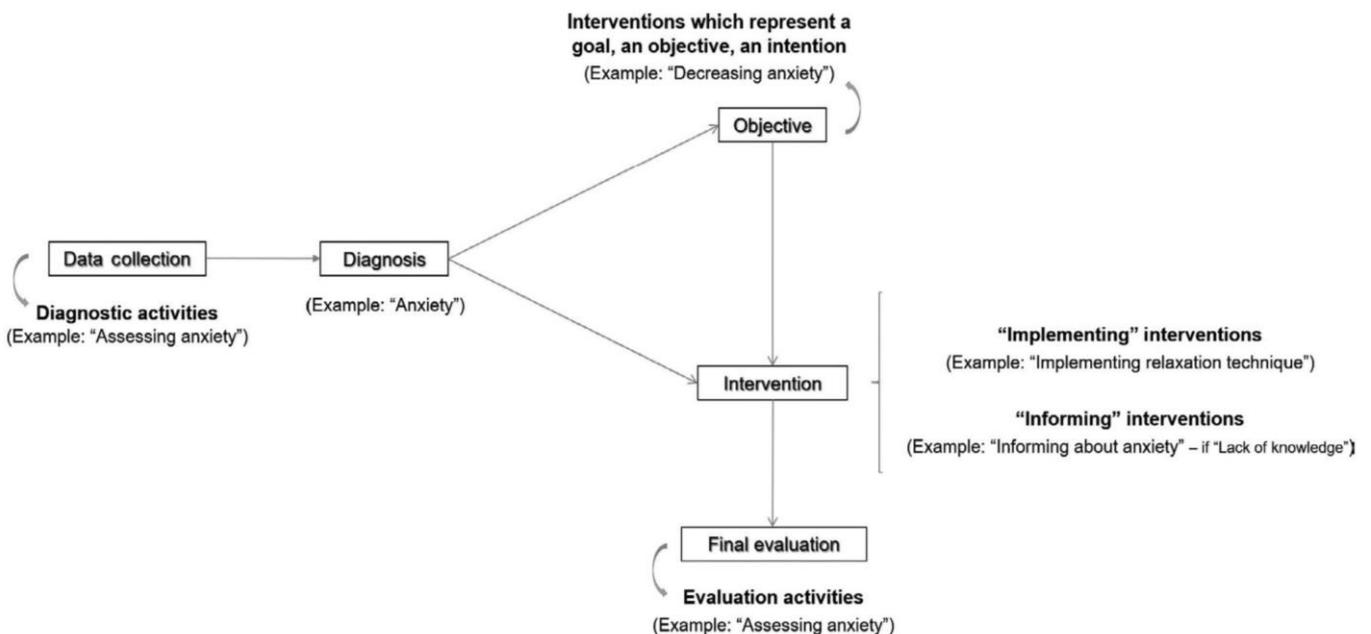
Interventions that represent a medical prescription should not be encompassed in the final result of the content analysis (we intend to include autonomous nursing interventions).

Example: The intervention "Administering intravenous medication" was excluded.

After the focus group meeting, the material resulting from the content analysis was submitted to the additional criteria. From this process, 198 definitive intervention categories were obtained. These categories were organized into four groups, according to their integration into the different steps of the nursing process. The nursing process represents the systematic, rigorous and efficient method of organizing thought processes for effective clinical decision-making, focused on problem-solving and the provision of individualized nursing care (Ackley & Ladwig, 2014; Silva, 2011). It is divided into five essential steps: (a) data collection for the diagnosis identification (by means of diagnostic activities), (b) diagnosis, (c) planning (selection of nursing interventions), (d) implementation (application of nursing interventions) and (e) final evaluation (by means of evaluation activities) (Doenges & Moorhouse, 2010). A nursing intervention is performed in order to fulfil a predetermined objective. Usually, the objective consists in diminishing or resolving the nursing diagnosis (problem) identified.

Considering the aforementioned steps of the nursing process, four types of intervention categories were identified: (a) Surveillance/Diagnosis/Evaluation activity, (b) "Informing" intervention, (c) "Implementing" intervention and (d) Intervention that represents an intention/an objective. Figure 1 shows how the different types of interventions identified should be placed into the different steps of the nursing process. The final intervention categories are presented in Table 2.

The definition of the final intervention categories was always based on the principle that semantic dispersion without clinical benefits is prejudicial to the quality of records and, consequently, the quality of nursing care provided. To that extent, we underscore the idea that the conjunction of certain verbs describing actions and



**FIGURE 1** Types of interventions identified according to the nursing process steps\*. \*The examples provided are related to the Nursing Diagnosis "Anxiety"

**TABLE 2** Final intervention categories

Surveillance/diagnostic/evaluation activities	"Informing" interventions		"Implementing" interventions	Interventions which represent a goal, an objective, an intention
Analysing, assessing, evaluating, monitoring, supervising, inspecting, observing	Teaching, instructing, training educating, explaining, informing		Implementing, providing	Stimulating, promoting, facilitating, decreasing, avoiding, preventing
Analysing, assessing, evaluating, monitoring, supervising, inspecting, observing: <ul style="list-style-type: none"> <li>• Adherence to therapeutic regime</li> <li>• Adherence to exercise regime</li> <li>• Adherence to dietary regime</li> <li>• Adherence to medication regime</li> <li>• Ability to manage regime</li> <li>• Agitation</li> <li>• Hallucination</li> <li>• Anxiety</li> <li>• Emotional support</li> <li>• Family support</li> <li>• Self-esteem</li> <li>• Cognition</li> <li>• Confusion</li> <li>• Awareness</li> <li>• Coping</li> <li>• Cultural belief</li> <li>• Impaired belief</li> <li>• Health belief</li> <li>• Religious belief</li> <li>• Readiness to learn</li> <li>• Euphoria</li> <li>• Volition</li> <li>• Hyperactivity</li> <li>• Hypoactivity</li> <li>• Hostility</li> <li>• Mood</li> <li>• Body image</li> <li>• Mourning</li> <li>• Fear</li> <li>• Memory</li> <li>• Short-term memory</li> <li>• Long-term memory</li> <li>• Obsession</li> <li>• Orientation</li> <li>• Thinking process</li> <li>• Perception</li> <li>• Socialization</li> <li>• Loneliness</li> <li>• Sadness</li> <li>• Violence</li> <li>• Will to live</li> <li>• Alcohol abuse</li> <li>• Drug abuse</li> <li>• Substance abuse</li> <li>• Tobacco abuse</li> <li>• SELF-control</li> <li>• Aggressive behaviour self-control</li> </ul>	Teaching about: <ul style="list-style-type: none"> <li>• Abuse</li> <li>• Alcohol abuse</li> <li>• Drug abuse</li> <li>• Substance abuse</li> <li>• Tobacco abuse</li> <li>• Adherence to therapeutic regime</li> <li>• Administering medication</li> <li>• Medication administration Technique</li> <li>• Pathological process</li> <li>• Body image</li> <li>• Distraction technique</li> <li>• Guided imagery technique</li> <li>• Agitation</li> <li>• Hallucination</li> <li>• Anxiety</li> <li>• Self-control</li> <li>• Aggressive behaviour self-control</li> <li>• Anxiety self-control</li> <li>• Fear self-control</li> <li>• Impulse self-control</li> <li>• Social interaction</li> <li>• Sexual behaviour</li> <li>• Cognition</li> <li>• Coping</li> <li>• Belief</li> <li>• Hostility</li> <li>• Mourning</li> <li>• Thinking process</li> <li>• Anger</li> <li>• Therapeutic regime</li> <li>• Exercise regime</li> <li>• Dietary regime</li> <li>• Medication regime</li> <li>• Community service</li> <li>• Stress</li> <li>• Relaxation technique</li> <li>• Sexual behaviour</li> </ul>	Instructing about: <ul style="list-style-type: none"> <li>• Calming technique</li> <li>• Medication administration technique</li> <li>• Distraction technique</li> <li>• Guided Imagery technique</li> <li>• Relaxation technique</li> <li>• Memory technique</li> <li>• Aggressive behaviour self-control</li> <li>• Anxiety self-control</li> <li>• Fear self-control</li> <li>• Stress self-control</li> <li>• Impulse self-control</li> <li>• Therapeutic regime</li> <li>• Exercise regime</li> <li>• Dietary regime</li> <li>• Medication regime</li> </ul> Training: <ul style="list-style-type: none"> <li>• Administering medication</li> <li>• Ability to manage regime</li> <li>• Self-control</li> <li>• Aggressive behaviour self-control</li> <li>• Anxiety self-control</li> <li>• Fear self-control</li> <li>• Stress self-control</li> <li>• Impulse self-control</li> <li>• Assertive behaviour</li> <li>• Distraction technique</li> <li>• Guided imagery technique</li> <li>• Relaxation technique</li> <li>• Memory technique</li> <li>• Calming Technique</li> </ul>	Implementing: <ul style="list-style-type: none"> <li>• Music therapy</li> <li>• Calming technique</li> <li>• Memory technique</li> <li>• Distraction technique</li> <li>• Motivational interviewing technique</li> <li>• Guided imagery technique</li> <li>• Relaxation technique</li> <li>• Relaxation therapy</li> <li>• Massage therapy</li> <li>• Group therapy</li> <li>• Support group Therapy</li> <li>• Reality orientation therapy</li> <li>• Family therapy</li> <li>• Art therapy</li> <li>• Reminiscence therapy</li> <li>• Humour therapy</li> <li>• Suicide precautions</li> <li>• Suicide precaution Management regime</li> <li>• Immobilisation regime</li> </ul> Providing: <ul style="list-style-type: none"> <li>• Emotional support</li> </ul>	Stimulating: <ul style="list-style-type: none"> <li>• Cognition</li> <li>• Memory</li> </ul> Promoting, facilitating: <ul style="list-style-type: none"> <li>• Adherence to therapeutic regime</li> <li>• Adherence to exercise regime</li> <li>• Adherence to dietary regime</li> <li>• Adherence to medication regime</li> <li>• Emotional support</li> <li>• Family support</li> <li>• Social support</li> <li>• Self-awareness</li> <li>• Self-control</li> <li>• Aggressive behaviour self-control</li> <li>• Anxiety self-control</li> <li>• Fear self-control</li> <li>• Impulse self-control</li> <li>• Self-efficacy</li> <li>• Self-esteem</li> <li>• Health seeking behaviour</li> <li>• Social interaction</li> <li>• Effective sexual behaviour</li> <li>• Ability to communicate Feelings</li> <li>• Awareness</li> <li>• Effective Coping</li> <li>• Mood Equilibrium</li> <li>• Hope</li> <li>• Exercise</li> <li>• Guilt management</li> <li>• Positive body image</li> <li>• Effective family process</li> <li>• Alcohol Abuse Recovery</li> <li>• Drug abuse recovery</li> <li>• Emotional recovery</li> <li>• Socialization</li> <li>• Effective decision-making</li> <li>• Will to live</li> </ul> Decreasing: <ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Hallucination</li> <li>• Delusion</li> <li>• Attempted Suicide risk</li> </ul> Avoiding/preventing: <ul style="list-style-type: none"> <li>• Alcohol abuse</li> <li>• Drug abuse</li> </ul>

(Continues)

TABLE 2 (Continued)

Surveillance/diagnostic/evaluation activities	"Informing" interventions	"Implementing" interventions	Interventions which represent a goal, an objective, an intention
Analysing, assessing, evaluating, monitoring, supervising, inspecting, observing	Teaching, instructing, training educating, explaining, informing	Implementing, providing	Stimulating, promoting, facilitating, decreasing, avoiding, preventing
<ul style="list-style-type: none"> <li>• Anxiety self-control</li> <li>• Fear self-control</li> <li>• Stress self-control</li> <li>• Impulse self-control</li> <li>• Aggressive behaviour</li> <li>• Self-destructive behaviour</li> <li>• Compulsive behaviour</li> <li>• Health seeking behaviour</li> <li>• Eating behaviour</li> <li>• Suicidal ideation</li> <li>• Risk for suicide</li> <li>• Social interaction</li> <li>• Delusion</li> <li>• Information processing</li> <li>• Withdrawal symptoms</li> <li>• Knowledge [about...]</li> </ul>			<ul style="list-style-type: none"> <li>• Substance abuse</li> <li>• Tobacco abuse</li> <li>• Self-destructive behaviour</li> <li>• Social isolation</li> <li>• Stress</li> <li>• Suicide</li> </ul>
Subtotal: 63	Subtotal: 67	Subtotal: 21	Subtotal: 47

determined focuses of attention could result in different syntaxes that, nonetheless, correspond to the same interventions. For example, in the assessment of hallucination, the sentences "Assessing hallucination," "Evaluating hallucination," "Analysing hallucination," "Checking hallucination," "Supervising hallucination," "Observing hallucination" or "Monitoring hallucination" correspond to the same intervention. In this study, these different types of terminology were integrated into a single category.

This study allowed us to discover some of the problems/difficulties of mental health and psychiatric nurses in defining nursing interventions, namely (a) lack of standardized language; (b) distinction between Intervention—action taken in response to a nursing diagnosis, in order to achieve a nursing outcome, surveillance/diagnosis/evaluation activity and objective/goal/intention; (c) identification of interventions that are incomplete or too wide-ranging; (d) identification of interventions without clinical benefits; (e) identification of interventions that contain ambiguous or incongruent contents; (f) appointment of interventions that correspond to global aspects centred on "good practices," that should not be documented, because they relate to properties inherent to the work of professional nurses; (g) identification of records that do not correspond to nursing interventions; and (h) incongruence between the focus of attention and the identified intervention.

## 4 | DISCUSSION

As mentioned above, no information was found in the literature with regard to which major nursing interventions are documented by nurses working in psychiatric wards. The final intervention

categories obtained by virtue of this study, integrated into the different steps of the nursing process, may correspond to some of the most relevant interventions identified in Portugal in the field of psychiatric and mental health nursing.

One of the aspects that stood out throughout the entire content analysis related to the lack of standardized language used by nurses in intervention definitions, which translates into the use of varied terminology to describe the same intervention—semantic dispersion without clinical benefits. Within the scope of various attention focuses, different verbal forms were used to document the same action. For example, within the focus "Mood"; nurses identified the interventions "Watching mood"; "Supervising mood"; "Monitoring mood"; "Assessing mood"; "Observing mood"; "Analysing mood"; "Evaluating mood"; "Checking mood," among others.

Throughout this work, a redundancy in the variability of concepts used in documenting the nursing interventions specified in the nursing informatics systems was verified, which corresponded to a very high number of different sentences used to express the same intervention. In that sense, we would emphasize the urgency of creating consensus regarding the terms to integrate the different nursing interventions to be identified, in the sense of standardizing records regarding nursing interventions responding to the needs in mental health and psychiatric care. These findings are consistent with the conclusions of the study conducted by Ruiz-Cano, Gómez-Trujillo, Cuevas-Guajardo, and Martínez-Vega (2017) who reviewed the nursing diagnoses and interventions documented in clinical records. They concluded that the use of standardized language by nurses is close to zero.

Kilbourne et al. (2018) claim that promoting quality measurement may serve as a tool for improving the quality of mental health

care and that one of the key barriers to this effort is the lack of standardized information technology-based data sources. Kautz et al. (2006) and Goossen et al. (2010) state that a high level of uniformity is necessary when collecting information in order to enable its later use, in particular regarding the production of indicators that can reveal the outcomes/gains in health care that are affected by nursing care. Thoroddsen et al. (2010) underscore that standardized nursing language describes patient responses to health problems, nursing interventions and patient outcomes, ultimately permitting the representation of nursing knowledge. Farren (2010) also emphasizes the importance of standardized nursing language, arguing that the link between its use and the enhancement of critical thinking has been supported in the specialized literature.

In addition to the lack of a common language, certain difficulties in nurses' interventions definitions were identified, particularly the distinction between intervention, surveillance/diagnosis/evaluation activity and intention/objectives, identification of interventions that are incomplete or too wide-ranging, identification of interventions without clinical benefits, identification of interventions that contain ambiguous or incongruent contents, appointment of interventions that correspond to global aspects centred on "good practices," that should not be documented, because they relate to properties inherent to the work of professional nurses, identification of records that do not correspond to nursing interventions and incongruence between the focus of attention and the identified intervention.

In relation to the first point—the distinction between intervention, surveillance/diagnosis/evaluation activity and intention/objective—it should be noted that the lack of distinction between the different types of interventions may not be due to a difficulty felt by nurses but, rather, to the organization and structure of the nursing informatics systems themselves, which do not allow this distinction to be made.

In as far as concerns the remaining points indicated as difficulties of nurses in the identification of nursing interventions, the following examples serve to illustrate those difficulties: *Incomplete or too wide-ranging interventions*: "Advising"; "Applying evaluation instrument"; "Implementing therapeutic techniques"; *Interventions without clinical benefits*: "Encouraging adaptation in a crisis"; "Encouraging impulses control"; "Encouraging aggressive behaviour self-control" (Nurses are responsible for evaluating what is preventing a client's self-control and for implementing interventions that allow the promotion of a client's competencies in this domain. We believe that "encouraging," by itself, will not bring relevant clinical benefits to the client); *Interventions containing ambiguous or incongruent contents*: "Protecting patient with pillows"; "Promoting the individual"; "Managing environmental medication"; *Interventions that correspond to "Good practices"*: "Identifying the client"; "Installing the bell next to the client"; "Checking the occurrence of adverse effects of medication" (Checking the occurrence of adverse effects of medication represents a good practice inherent to the intervention: "Administering medication"); *Records that do not translate nursing interventions*: "Managing telephone conversations"; "Implementing shiatsu technique"—the documentation of these interventions

indicates that nurses are demanded to spend their time on tasks that are in fact not theirs, potentially leading to the negligence of tasks that actually are; *Incongruent interventions in relation to the nursing focus*: "Promoting maintenance of body weight" associated with the focus "Hallucination"; "Massaging head" associated with the focus "Suicide."

It is important to note that the interventions mentioned were incorporated in the nursing informatics systems themselves, which, in itself, may represent a problem (preceding any actual difficulties felt by the nurses). The nursing informatics systems may possess structural limitations, permitting inadequate interventions to be identified, which demonstrates the need to analyse and standardize existing interventions that can be identified by nurses in these systems.

Nurses also identified interventions that did not possess a compatible term in ICNP®, version 2015, namely "Implementing psycho-educational session"; "Planning help relationship"; "Implementing help relationship"; "Implementing behaviour modification technique"; "Implementing cognitive restructuring technique." In these cases, it will be important to reflect on the relevance of these interventions for mental health and psychiatric nurse practices and perceive whether their addition to ICNP® and the nursing informatics systems will be pertinent.

#### 4.1 | Limitations

Despite the interesting results obtained by this study, it does bear some limitations. One of these limitations relates to the fact that the focuses to be included in the study and the criteria applied in the content analysis were defined exclusively by the research team. Furthermore, the criteria applied in the interventions' analysis were based on the Portuguese' reality of what nurses do. However, nurses' tasks/responsibilities/functions may be different in different countries, reason why some criteria may not be applicable to different realities.

The aim of this study was to analyse specific interventions in the field of mental health and psychiatry. With this purpose in mind and considering the wide range of nursing interventions identified in the information systems in Portugal, all the interventions that were not specifically associated with mental health and psychiatry were excluded, including those associated with physical health care. Bearing in mind the relationship between mental and physical health supported by the literature (Blythe & White, 2012; Bressington et al., 2018; Robson, Haddad, Gray, & Gournay, 2013), this could be a limitation, because it may have led to the exclusion of certain important aspects of mental health nursing.

The fact that the focus group only met during one session, although this might allow data saturation, does not allow potential variations in the opinion of the experts over time to be perceived. Finally, the lack of an external observer in the focus group corresponds to a limitation because this did not allow us to obtain data centred on the nonverbal communication of the participants nor on the subliminal messages.

## 5 | CONCLUSIONS

The final intervention categories obtained by virtue of this study, integrated into the different steps of the nursing process, may correspond to some of the most relevant interventions identified in Portugal in the field of psychiatric and mental health nursing. Nurses identified different types of interventions: (a) Surveillance/Diagnosis/Evaluation activity, (b) "Informing" intervention, (c) "Implementing" intervention and (d) Intervention that represents an intention/objective. The nursing interventions identified by nurses in the nursing informatics systems demonstrate the complexity and diversity of nursing care in inpatient psychiatric settings in Portugal.

This study revealed the lack of standardized language used by nurses in intervention definitions, which results in the use of varied terminology to describe the same intervention. The production of nursing indicators and the subsequent visibility of nursing care can only be achieved if nurses adopt a common language. "Because language is the core of our common understanding, it needs to have the capability to describe the condition of patients and concepts that are meaningful to nurses." (Thoroddsen et al., 2010, p. 69). The use of a common language by professional nurses is an essential requirement in order to build structured and formal knowledge in nursing.

## 6 | IMPLICATIONS FOR PRACTICE

This study aims to provide information on the most relevant interventions in the field of psychiatric and mental health nursing identified in Portugal. It may constitute an important contribution towards the standardization of language used by psychiatric and mental health nurses in intervention definitions, which may improve the nursing records within nursing informatics systems and, therefore, make a significant impact on the quality of nursing care.

A standardised nursing language should be defined so that nursing care can be communicated accurately among nurses and other health care providers. Once standardized, a term can be measured and coded. Measurement of the nursing care through a standardised vocabulary by way of an electronic documentation will lead to the development of large databases. From these databases, evidence-based standards can be developed to validate the contribution of nurses to patient outcomes.

Rutherford (2008)

Clark and Lang (1992, p. 109) state that "If we cannot name it, we cannot control it, practice it, teach it, finance it, or put it into public policy." As pointed out by Gonçalves et al. (2018), the standardization of language used by psychiatric and mental health nurses will contribute towards producing health indicators that may show policymakers the contribution and importance of nursing care towards population

health. Therefore, a stronger investment in the mental health nursing field by political stakeholders may be achieved, particularly through adjustment of nurse-patient ratios.

This study may also contribute to the improvement of nursing informatics systems in use in psychiatric departments, particularly through the differentiation between the different types of intervention (Surveillance/Diagnosis/Evaluation activities; "Informing" interventions; "Implementing" interventions; and Intentions/objectives), placing them into the proper steps of the nursing process. Besides, nurses' clinical reasoning and critical thinking towards the nursing process application may be improved.

Documentation is an essential role of professional nursing practise. In spite of numerous improvement efforts globally, inadequate documentation continues to be reported. Training nurses to improve documentation practices has been a widely recognized strategy (Okaisu, Kalikwani, Wanyana, & Coetzee, 2014). Identifying the major problems felt by nurses in interventions documentation is the first step towards overcoming them. The problems identified in this study regarding nursing documentation may suggest that more training for professional nurses in the field of standardized language and intervention formulation is needed. Also, nursing informatics systems should be subject to greater investment and reformulation, in particular by limiting intervention possibilities for nurses.

In our opinion, the results obtained from this study are very relevant in international terms, because they provide information for other countries that may allow them to avoid the same problems and to develop similar work, as well as to compare the final interventions obtained in Portugal with their own specific circumstances.

## 7 | RELEVANCE STATEMENT

This study provides information on some of the most relevant nursing interventions documented by nurses working in the Portuguese National Health Service psychiatric wards. It constitutes an important contribution to the standardization of the language used by mental health nurses in intervention definitions, which may lead to the production of health indicators that will show policymakers the importance of nursing care towards population health. This study also contributes to the improvement of nursing informatics systems in use in psychiatric departments, particularly through the differentiation between different types of intervention, placing them into the proper steps of the nursing process.

### CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

### AUTHOR CONTRIBUTIONS

Study design: Patrícia Gonçalves, Carlos Sequeira and Maria Antónia Silva; Data collection: Patrícia Gonçalves, Carlos Sequeira and Maria Antónia Silva; Data analysis: Patrícia Gonçalves; Study supervision:

Carlos Sequeira and Maria Antónia Silva; Manuscript writing: Patrícia Gonçalves; Critical revisions for important intellectual content: Patrícia Gonçalves, Carlos Sequeira and Maria Antónia Silva.

## ETHICAL APPROVAL

Project approved for the Scientific Technical Council that is part of the Ethics Committee of Escola Superior de Enfermagem do Porto (Oporto Nursing School), as recorded in Annex I of Act 25 of 2016, with the number 25/2016 of 27/06.

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**Artigo 3:** «Data, diagnoses, and interventions addressing the nursing focus “delusion”: A scoping review»

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## REVIEW

# Data, diagnoses, and interventions addressing the nursing focus “delusion”: A scoping review

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## Abstract

**Purpose:** To explore and synthesize literature related to the nursing process addressing the focus “Delusion”.

**Design and Methods:** This literature review is integrated with a scoping study framework. From the total 252 papers found, 39 were selected.

**Findings:** Relevant data and diagnostic activities, hypothetic nursing diagnoses, and interventions addressing the focus “Delusion” were identified.

**Practice Implications:** This literature review allowed the development of a clinical data model addressing the focus “Delusion”, based on the steps of the nursing process identified. This clinical data model may contribute towards improving nursing clinical decision-making and nursing care quality in relation to a client suffering from delusion as well as producing more reliable nursing-sensitive indicators.

## KEYWORDS

delusions, nursing, nursing process, psychiatric nursing, review

## 1 | INTRODUCTION

Nurses collect, analyse, and interpret data, to issue a clinical opinion regarding people’s health condition and, in this way, formulate nursing diagnosis.<sup>1,2</sup> The data corresponds to elementary units of information regarding people’s health, collected by nurses to identify real or potential problems and opportunities for client development. The relationship between different sets of data allows its transformation into information.<sup>2</sup> This information is translated into a nursing diagnosis, which is defined by the International Council of Nurses<sup>3</sup> as a label given by a nurse to the decision about a phenomenon. Nursing intervention is defined as an action taken in response to the nursing diagnosis, to achieve a nursing outcome.<sup>3</sup> Data collection, diagnosis, and intervention are crucial steps in the nursing process, which represents the systematic, rigorous, and efficient method of organizing thought processes for effective clinical decision-making, focused on problem-solving and the provision of individualized nursing care.<sup>2,4</sup>

Internationally, there is a growing interest in clarifying the contribution of nursing care towards general health and client recovery<sup>5-8</sup> emphasize the need for producing nursing-sensitive quality health indicators that can demonstrate the contribution of nursing care towards population health. In this matter, data quality plays a very important role.<sup>9</sup> The formal modeling of clinical data is one of the most promising ways to obtain health indicators that can convey the importance of nursing care.<sup>10</sup> In this sense, it is believed that the greatest contribution of health records is the standardization of nursing information systems, through the definition of clinical data models.

Clinical data models allow information concepts to be structured, supporting the reuse of clinical communication components across the board and promoting common approaches to clinical information system development and interoperability.<sup>11</sup> The development of nursing clinical models provides evidence-based data elements related to nursing care, which can contribute to information

exchange, clinical decision support, quality reporting, research, and the improvement of nursing care quality.<sup>7</sup>

The nursing discipline has evolved from a purely executive concept to an approach focused on clinical decision-making by nurses.<sup>2</sup> The development and incorporation of clinical information models that represent the core concepts of the nursing discipline, organized, and structured based on the available formal knowledge, will support nurses in making better decisions, more congruent with the clients' specific needs. According to Spigolon,<sup>12</sup> the following question arises: what information is essential to describe the nursing diagnoses, interventions, and outcomes and how to represent it in the nursing information systems?

Several different research has developed health care data models, most of them centered on the domain of medical knowledge.<sup>13</sup> A few studies have already been developed to build nursing clinical models,<sup>13-17</sup> among others. However, none of them is related to the field of mental health and psychiatric nursing. Moreover, despite the recognized importance of the nursing process regarding the quality of care, the evidence found in the literature on its application in mental health is incipient.<sup>18</sup>

Within the scope of mental health nursing, one of the nursing diagnoses identified in Portugal is "Delusion".<sup>19</sup> According to the ICN,<sup>20</sup> delusion is an impaired belief: a false sense of reality that cannot be corrected by reason, argument, or persuasion or by evidence of one's own senses.<sup>20</sup> The delusion constitutes a disturbance in the individual's thought process, resulting in a false idea or belief about specific content. This false belief is fixed and unchangeable despite evidence of the contrary.<sup>21,22</sup> Various studies indicate an incidence of 0.7 to 3.0 out of 100 000 and a prevalence of 24 to 40 out of 10 000 cases of delusional disorders (Manchreck<sup>23</sup> in Soyka et al<sup>24</sup>). Considering a nursing approach to delusion, the following questions emerge: what data should nurses consider when assessing a patient with delusion? Taking that data into account, which diagnoses should nurses identify? Finally, what interventions should nurses implement, address these diagnoses?

## 1.1 | Aim

The aim of this review was to explore and synthesize literature related to the nursing process addressing the focus "Delusion".

## 2 | METHODS

This scoping review paper provides a summary, explanation, and interpretation of the breadth of the currently available qualitative and quantitative evidence that addressed the review questions. A scoping study framework uses a systematic approach with five distinct steps as detailed below and does not limit the review to only primary research papers, but allows relevant grey literature to also be considered.<sup>25,26</sup> This method enables the review to extract divergent data and develop it in a meaningful, transparent, and systematic way.<sup>27</sup> The five essential steps are as follows: (a)

identifying the research question(s); (b) identifying the relevant studies; (c) study selection; (d) charting the data; and (e) collecting, summarizing and reporting the data. Preferred reporting items for systematic reviews and meta-analyses checklist for scoping reviews were followed<sup>28</sup> (See Supporting Information File S1). The following inclusion criteria were used: peer-reviewed research and nonresearch papers including grey papers providing information about nursing diagnoses, diagnostic activities and relevant data for the diagnoses, and interventions addressing the focus "Delusion"; whether written in English, Spanish, or Portuguese. Conversely, the exclusion criterion was: papers reporting children or adolescents with delusions.

### 2.1 | Step 1: identifying the research questions

By having well-defined research questions, the scope of the studies included will be both practical and effective.<sup>29</sup> For this review, three research questions were developed: (a) what diagnostic activities and relevant data can lead to nursing diagnoses related to the focus "Delusion?"; (b) what diagnostic hypotheses are related to the focus "Delusion?"; and (c) what nursing interventions can help resolve or diminish the diagnostic hypotheses related to the focus "Delusion?"

### 2.2 | Step 2: identifying relevant published papers

Before identifying relevant papers, the authors determined keywords based on the research questions. In this way, electronic databases including MEDLINE, CINAHL, Web of Science, and Scopus were searched using these terms to locate papers that met the inclusion criteria: "delusion\*" AND "nurs\*" AND ("diagnos\*" OR "intervention\*") NOT ("child\*" OR "adolescen\*"). Publication dates were limited from 2008 to 2018.

### 2.3 | Step 3: selecting relevant papers

From the search, performed independently by two researchers (PDBG and FMCS), 252 papers were found (all of them written in English). Of this number, 88 papers were duplicates. After removing the duplicates, 164 papers were assessed as meeting the inclusion criteria. These 164 papers were further examined in terms of the inclusion criteria by reading their titles and abstracts. After the full texts were read and assessed against the review questions, 39 papers were considered suitable for inclusion in the final data set. The selection of relevant papers was based primarily on the research questions, rather than a critical appraisal process. The reviewed research papers' quality is usually not appraised in a scoping review seeing that the review seeks to encompass the range of all available material.<sup>25,27</sup> Undertaking detailed methodological critiques of the studies may unduly limit the number of selected papers and, therefore, inappropriately exclude papers that would still provide a wealth of information to answer the research questions; in this way, a wide range of methods and study designs should be included to provide an appreciation of the scope or extent of literature available

on a thinly researched topic.<sup>25</sup> The procedure used to select the included papers is displayed in Figure 1.

## 2.4 | Step 4: data charting

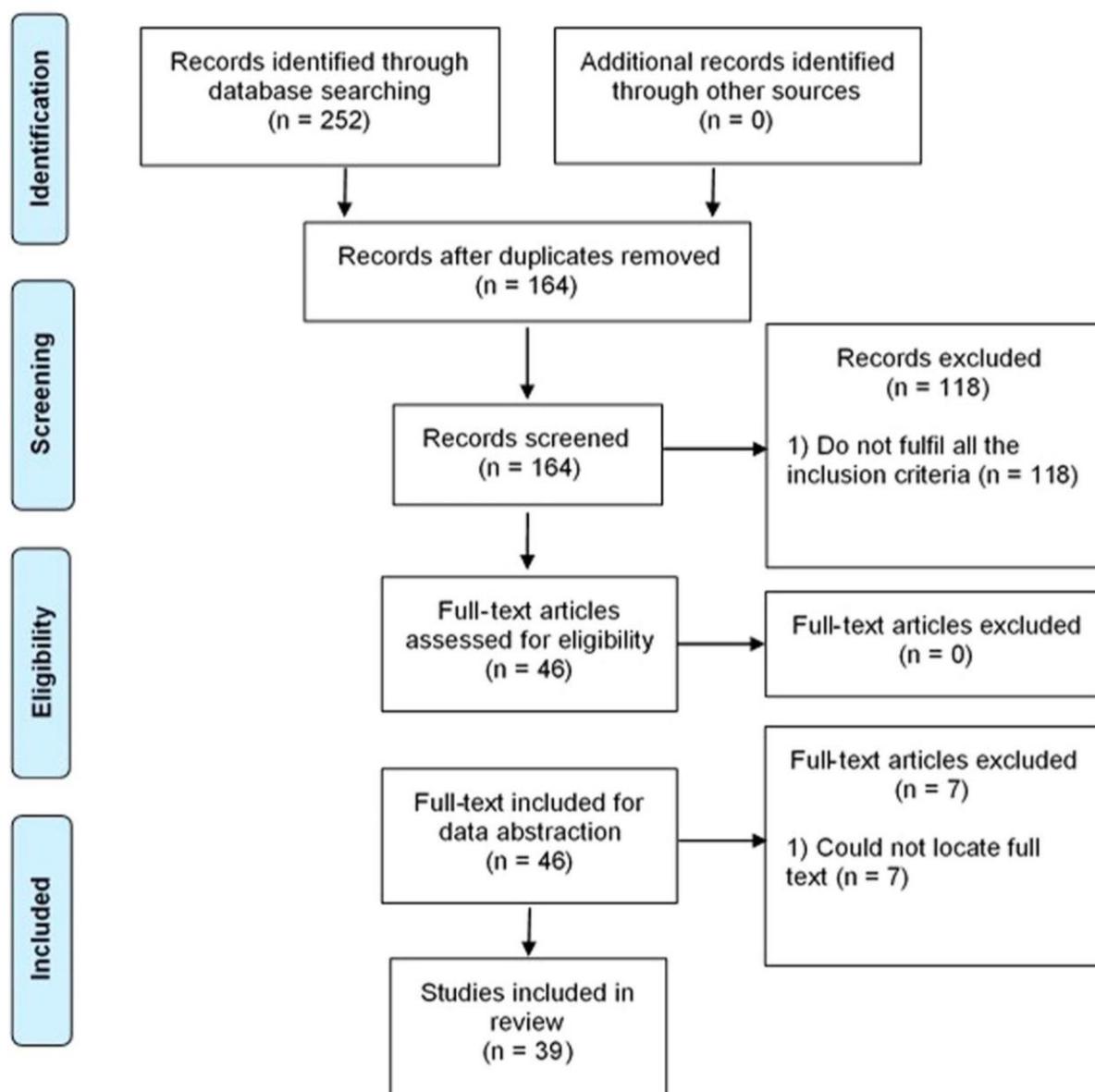
Each of the included 39 full-text papers was read thoroughly and independently, several times, by two of the researchers (PDBG and FMCS) to obtain all the relevant information. A data set from the papers was constructed by extracting findings relevant to the questions asked. The data set was refined regularly by considering whether the extracted data were consistent with the review questions and the study aim. The extracted data set was categorized using authors, study aims, study design, participants and/or sample, and themes in a practical table (See Appendix A). The design of this

data set was discussed by two of the review authors (PDBG and FMCS) to ensure all relevant information was included.

## 2.5 | Step 5: collecting, summarizing, and reporting of results

There are various ways to collect and summarize the data, including organizing the data thematically.<sup>25</sup> The thematic analysis helped to recognize, analyse, and narrate patterns identified in the data set.<sup>31</sup> The themes, which were predefined (diagnostic activities and relevant data, diagnostic hypotheses, and nursing interventions addressing the focus “Delusion”) reflect the key concepts of this review and those that allow the questions posed to be answered.

One researcher (PDBG) assigned each study to the predefined themes. That assignment was validated by a second researcher



**FIGURE 1** Search strategy recorded in a flow chart, adapted from Moher et al<sup>30</sup> Preferred Reporting Items for Systematic Reviews and Meta-Analyses and Arksey and O'Malley<sup>25</sup> scoping study framework stages [Color figure can be viewed at wileyonlinelibrary.com]

(FMCS). Discrepancies were discussed and resolved. Where appropriate, studies were assigned to more than one theme.

### 3 | RESULTS

A total of 39 papers were reviewed. Most of the studies were literature reviews. The oldest paper was published in 2008. The predefined themes are explained in the manner stated below.

#### 3.1 | Diagnostic activities and relevant data

Considering the amount and diversity of obtained data regarding the theme “diagnostic activities and relevant data”, this was subdivided into two themes: conditions associated with the delusions and clinical manifestations/defining characteristics.

To better describe the conditions associated with the delusions, we considered the disorders that underlie delusions as well as the risk factors for delusions. In this way, while psychotic and neurodegenerative disorders were the ones more commonly associated with the delusions, the main risk factors are sleep disorders, cognitive impairment, stress, and the use of dopaminergic medication.

With regard to the clinical manifestations/defining characteristics, data that lead to the diagnosis (delusion) and data that characterize it were obtained. While the former were obtained through concept analysis of the term “delusion”, the later were obtained through item analysis of the delusion assessment tools. Thus, at this level, it seems to be particularly relevant to assess the delusion impact on thinking, behavior, feelings and social relations, delusion conviction, delusion systematization, delusion persistence/duration, delusion insight, and the preoccupation associated with delusion. Finally, some assessment tools were found to be relevant diagnostic activities that can lead to or characterize the diagnosis “Delusion”. The ones which were most commonly referred to in the literature are the Psychotic Symptom Rating Scales (PSYRATS) and the Positive and Negative Syndrome Scale (PANSS) (See Table 1).

#### 3.2 | Diagnoses

In as far as concerns the nursing diagnoses related to the focus “Delusion”, results were obtained regarding types of delusion. At this level, “Paranoid delusions”, including “Persecutory/suspicious delusion” and “Delusion of reference”, were those more commonly referred to in the literature.

However, some diagnoses which comprise two nursing focuses were also found, and those also seem to be extremely relevant for the nursing process addressing the focus “Delusion”. In this way, diagnoses such as “Lack of delusion awareness” and “Lack of knowledge about delusion” were also mentioned in the literature and considered in this review (See Table 1).

#### 3.3 | Interventions

Finally, some nursing interventions that can help resolve or diminish the diagnostic hypotheses related to the focus “Delusion” were found. The most commonly referred in the literature are Cognitive Behavioral Therapy and Metacognitive Training.

Figure 2 presents a schematic summary of the results.

### 4 | DISCUSSION

This scoping review is the first to explore the nursing process addressing the focus “Delusion”. In this way, information about diagnostic activities and relevant data, diagnostic hypotheses, and nursing interventions related to the focus “Delusion” have been described.

The literature reviewed in this study has suggested that psychotic and neurodegenerative disorders are those that most commonly underlie delusion. This finding is in line with the diagnostic manual for mental disorders, in which delusions are listed as a primary characteristic symptom in psychotic disorders<sup>21</sup> and with the review performed by Cipriani et al,<sup>32</sup> which underlines that delusions are common, disabling, and persistent in the course of dementia.

According to this literature review, sleep disorders, and cognitive impairment are the most relevant risk factors for delusion. A recent systematic review concluded that psychotic symptoms develop with increasing time awake, from simple visual/somatosensory misperceptions to hallucinations and delusions, ending in a condition resembling acute psychosis.<sup>33</sup> Furthermore, Dillon et al<sup>34</sup> emphasize the relationship between mild cognitive impairment and a higher rate of neuropsychiatric symptoms, including delusion.

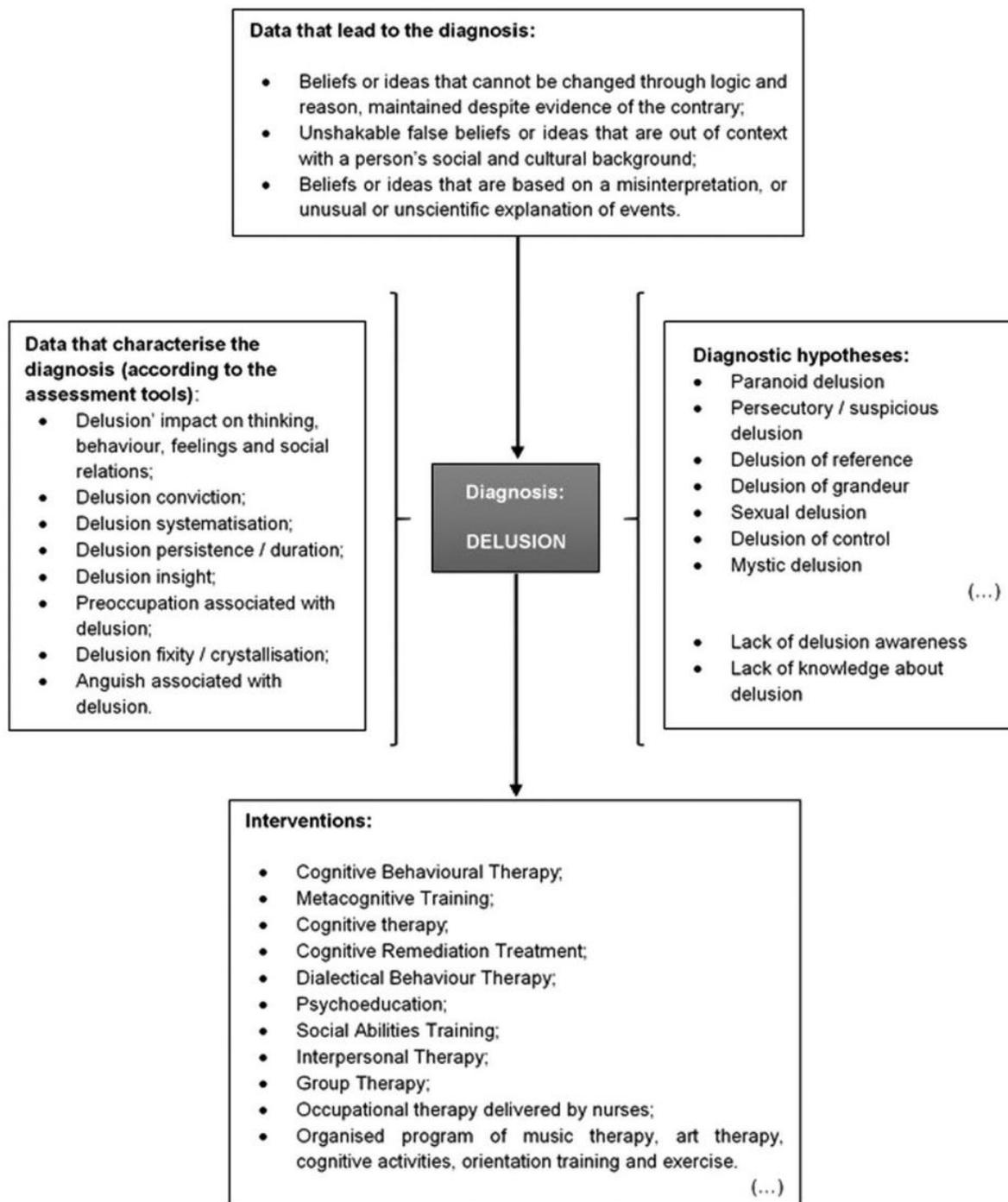
The defining characteristics of delusions that lead to the diagnosis, if analysed in detail, are the definition of “delusion” per se, which makes us realize that delusion is the first level of evidence (it does not need data to sustain it). In fact, these defining characteristics are in line with classic literature, in which delusions are defined as a change in the individual’s thinking process, translated into a false belief about certain content. This false belief is fixed and unchangeable in light of the evidence.<sup>21</sup>

According to Forgáčová,<sup>35</sup> delusions are a multidimensional construct characterized by a number of components (dimensions). This idea is in line with the results of this study, which identified important data that characterize the delusion diagnosis, including delusion impact on thinking, behavior, feelings and social relations, delusion conviction, delusion systematization, delusion persistence, delusion insight, preoccupation associated with delusion, among others.

Assessment tools may contribute towards describing characteristics of a heterogeneous sample of delusions, to clarifying differences between delusional and nondelusional states as well as towards assessing the delusional degree.<sup>35</sup> In the reviewed literature, the most commonly used assessment tools for delusion were the PSYRATS and the PANSS. The PSYRATS include two subscales to measure the severity of various dimensions of verbal hallucinations

**TABLE 1** Summary of relevant data, diagnostic activities, nursing diagnoses and interventions related to the focus "Delusion"

Relevant Data and Diagnostic Activities (n)	Clinical manifestations / Defining characteristics	Diagnoses (n)	Interventions (n)
<b>Conditions associated with Delusion</b>	<b>Delusions' Defining characteristics - Data that leads to the diagnosis:</b>		
Disorders that underlie delusion	✓ Beliefs or ideas that cannot be changed through logic and reason, maintained despite evidence of the contrary (2)	Paranoid delusion (12)	Cognitive Behavioural Therapy (8)
✓ Schizophrenia (6)	✓ Unshakable false beliefs or ideas that are out of context with a person's social and cultural background (1)	✓ Persecutory / suspicious delusion (5)	Metacognitive Training (5)
✓ Psychosis in Parkinson Disease (6)	✓ Beliefs or ideas that are based on a misinterpretation, or unusual or unscientific explanation of events (1)	✓ Delusion of reference (3)	Cognitive therapy (1)
✓ Postpartum Psychosis (1)	✓ They indicate an abnormality in the patients' thoughts (1)	Delusion of grandeur (4)	Cognitive Remediation Treatment (1)
✓ Bath-Salts Induced Psychosis (1)		Sexual delusion (3)	Dialectical Behaviour Therapy (1)
✓ Othello Syndrome (1)	<b>Delusions' Defining characteristics - Data that characterize the diagnosis:</b>	Delusion of control (3)	Psychoeducation (1)
Neurodegenerative Disorders (15)	✓ Delusion' impact on thinking, behaviour, feelings and social relations (3)	Mystic delusion (3)	Social Abilities Training (1)
Mood Disorders (8)	✓ Delusion conviction (3)	Delusion of jealousy (2)	Interpersonal Therapy (1)
Delirium (2)	✓ Delusion systematisation (2)	Delusion of theft (2)	Group Therapy (1)
Endocrine disorders (1)	✓ Delusion persistence / duration (2)	Delusion of infidelity (2)	Occupational therapy delivered by nurses (1)
Metabolic Disorders (1)	✓ Delusion insight (2)	Somatic delusion (2)	Organisational program of music therapy, art therapy, cognitive activities, orientation training and exercise (1)
<b>Risk factors associated with delusion</b>	✓ Preoccupation associated with delusion (2)	Thought broadcasting delusion (2)	
Sleep disorders (5)	✓ Delusion fixity / crystallisation (1)	Thought broadcasting delusion (2)	
Cognitive impairment (5)	✓ Anguish associated with delusion (1)	'One's house is not one's home' delusion (1)	
Stress (4)		Delusion of abandonment (1)	<b>Other therapeutic elements</b>
Use of dopaminergic medication (4)		Delusion of abandonment (1)	Clinical Interview (1)
Substance abuse (3)		Delusion of danger (1)	Active listening (1)
Visual or auditory deficits (3)		Delusion of guilt (1)	Emotional support (1)
Cognitive distortions (cognitive errors) (3)		Bizarre delusion (1)	Improving sleep pattern and quality (1)
Brain changes (2)		Delusion of misidentification (1)	Assisting in restoring the level of normal sensory inputs (1)
Advanced stage / Long-term Parkinson's disease (2)		Partition delusion (1)	Assisting in restoring the family environment (1)
Infection (2)		Thought interference delusion (1)	Assisting the client to connect with reality (1)
Advanced age (1)		Thought insertion delusion (1)	Assisting in the decision-making process (1)
Lack of insight / awareness (1)		Thought withdrawal delusion (1)	Assisting in the reconstruction of interpersonal relationships (1)
Lack of metacognitive skills (1)		Fregoli delusion (1)	Assisting in medication management (1)
Traumatic life events (1)		Capgras delusion (1)	Assessing security risks (1)
Alcohol abuse (1)		Lack of delusion awareness (6)	Safety Precautions: Physical restraint (1)
Use of anticholinergic medication (1)		Lack of knowledge about delusion (1)	Education about sexual functioning / sexuality (1)
Complex therapeutic regimens (1)			
Dehydration (1)			
Significant postpartum hormonal changes (1)			



**FIGURE 2** Summary of the results

and delusions.<sup>36</sup> The PANSS is a 30-item scale developed to assess the severity of symptoms in schizophrenia. It includes three subscales for different types of symptoms: positive symptoms, negative symptoms, and general psychopathology.<sup>37</sup>

The American Psychiatric Association<sup>21</sup> states that the contents of delusion may include a variety of themes. In as far as concerns diagnostic hypotheses, the most common type of delusions identified by the literature in this review was a paranoid delusion, including persecutory delusion, and delusion of reference. This finding is in line with the American Psychiatric Association,<sup>21</sup> that indicates that

persecutory delusion is the most common type of delusion and that delusion of reference is also common. This Association also indicates delusion of grandeur, sexual delusion, the delusion of jealousy, nihilistic delusion, and somatic delusion as other important types of delusions. It is important to emphasize the absence of terms such as “persecutory” or “reference” in the International Classification for Nursing Practice,<sup>20</sup> which precludes documentation of these accurate diagnoses by nurses.

In addition to the aforementioned diagnoses, lack of delusion awareness is another diagnosis frequently related to the nursing focus “Delusion”. In fact, it has been demonstrated that the presence

of positive psychotic symptoms (delusions and hallucinations) is related to the lack of metacognitive skills and insight,<sup>38,39</sup> which proves the importance of this diagnosis. Metacognitive training, one of the most relevant interventions for delusions found in this review, is a new group treatment program developed for patients with schizophrenia, exactly to improve patient thinking regarding their biased thoughts by enhancing metacognitive skills and insight towards these thoughts. Several studies have shown positive results of metacognitive training towards delusion, which is in line with the results of the present review.<sup>39,40</sup> It is important to emphasize the absence of the term metacognitive training in the International Classification for Nursing Practice<sup>20</sup> which, once again, precludes documentation of this intervention by nurses.

Cognitive Behavioral Therapy was one of the most important interventions identified in this review to respond to the nursing diagnosis "Delusion", which is corroborated by Roudsari et al.<sup>41</sup> However, it is a psychotherapeutic intervention. That can be a difficulty for nurses as, in some countries, they are not allowed to perform it.<sup>42</sup>

#### 4.1 | Strengths and limitations

A strength of this literature review is that the search included English, Spanish, and Portuguese language papers. Moreover, as two researchers (PDBG and FMCS) independently carried out all the steps of the review, some bias was avoided and the reproducibility of the search process was enhanced. Finally, the evidence found seems to be transferable to other contexts, considering that studies from different regions worldwide were included in the review.

On the other hand, there are certain limitations which are inherent to a scoping review approach: (a) the considerable quantity of data generated and (b) the absence of "synthesis", ie, the relative weight analysis of the evidence found. Furthermore, a systematic evaluation of the quality of the articles included in this review was not carried out. This option was based on the inclusive nature of the review, as we believe that it would be important to provide a wide view of the topic of the study.

## 5 | CONCLUSIONS

The results of this review highlight some diagnostic hypotheses related to the focus "Delusion", relevant data and diagnostic activities for the identification of those diagnostic hypotheses as well as nursing interventions which can help resolve or diminish them. In this way, when assessing delusion, nurses should pay attention to the disorders which commonly underlie it, such as psychotic and neurodegenerative disorders, as well as to risk factors for delusions such as sleep disorders or cognitive impairment. Some assessment tools, such as the PSYRATS and the PANSS, can be used by nurses to help diagnose a delusion. However, even in the absence of assessment tools, certain characteristics of the delusion, such as delusion' impact on thinking, behavior, feelings and social relations,

delusion conviction, delusion systematization, delusion persistence/duration, delusion insight, and the preoccupation associated with delusion should be assessed. Some diagnoses related to the type of delusion may be identified by nurses, such as "Persecutory/suspicious delusion" and "Delusion of reference". Moreover, they can also identify diagnoses that combine more than one nursing focus (eg, lack of delusion awareness). Finally, some interventions seem to be particularly relevant for patients with delusions, such as metacognitive training.

The nursing process is a problem-solving method, allowing nurses to address patient-related problems in a logical and structured way. Given the scarce formalization of this process in the area of mental health, proven by the inexistence of clinical data models in this field, we believe that, nowadays, this is an emerging and challenging area. Quality of health care requires sharing the information obtained from the nursing process. In this sense, decision support systems play a central role, requiring the data to be formalized, structured, and codified.

In spite of these results, the findings of this review reinforce the need to improve the International Classification for Nursing Practice as some of the diagnoses and interventions cannot be recorded by nurses due to the absence of terms in the classification (eg, persecutory delusion; metacognitive training). Regarding nursing interventions which can help resolve or diminish delusions, some of them are psychotherapeutic (eg, Cognitive-Behavioral Therapy); however, in some countries, nurses are not allowed to perform them.

The findings of this review allowed the development of a clinical data model for the nursing focus "Delusion". However, in future research, it would be relevant to test the efficacy of that clinical data model in clinical practice, ie, to evaluate if the relevant data effectively lead nurses to the correct diagnoses, if the proposed interventions are, indeed, effective in resolving or diminishing the nursing diagnosis, etc. Before that, carrying out a Delphi study would be important to validate the content validity of the developed clinical data model with experts and, eventually, to render it more comprehensive with the addition of complementary data. In addition, given the importance of clinical data models, we recommend the development of clinical models related to other nursing focuses.

## 6 | IMPLICATIONS FOR NURSING PRACTICE

Clinical data models in nursing are crucial for sustained decision making, contributing to the development of knowledge intrinsic to the discipline of nursing and for the production of indicators that reflect the importance of nursing care. This review allows the development of a clinical data model concerning delusion, which will help nurses address this important nursing focus in a formal, structured, and standardized manner.

The development of clinical data models seems to provide nurses with the opportunity to systematize their body of knowledge and, subsequently, to record it consistently. Therefore, the

integration of this clinical data model into the nursing information systems will support nurses to make effective clinical decision-making concerning this focus, based on evidence. This will result in increased quality of nursing care towards a patient with delusion.

The formal modeling of clinical data is one of the most promising ways to obtain health indicators that may convey the importance of nursing care.<sup>10</sup> Nursing indicators are extremely relevant for health policy because they allow the measurement of the nurses' autonomous interventions impact on patients' health gains. That impact is translated into financial measures, which are essential to evaluate and to guarantee the positive balance of healthcare systems. The clinical data model that this study helps develop aims to provide an important contribution towards producing health indicators that can show policymakers the contribution and importance of nursing care towards population health, particularly towards a patient with delusion. Therefore, a stronger investment in the field of mental health nursing by political stakeholders may be achieved, particularly through the adjustment of nurse-patient ratios.

It would also be important to evaluate the economic impact of nursing clinical data models on clinical practice by conducting cost-effectiveness studies. These are extremely relevant for decision-makers and, taking this into account, carrying them out would be vital to demonstrate the importance and the potential economic impact of nurses on healthcare systems.

## CONFLICT OF INTERESTS

The authors report no actual or potential conflicts of interest.

## AUTHOR CONTRIBUTIONS

Study design: PGBG, FMCS, CACS, and MATCPS. Data collection: PGBG and FMCS. Data analysis: PGBG and FMCS. Study supervision: CACS and MATCPS. Manuscript writing: PGBG and FMCS. Critical revisions for important intellectual content: CACS, MATCPS, PGBG, and FMCS.

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## APPENDIX A

## Summary of Selected Papers

Author (s)	Aim	Design	Participants and samples	Theme (s)
Austrom et al. (2014)	a) To explore the most stressful events reported by intervention caregivers over a 6-mo period. b) To examine the association between the caregivers' most stressful event reported and their depressive symptoms, as measured by the Patient Health Questionnaire (PHQ-9) and the care recipient's memory and behavioral problems as measured by the Revised Memory and Behavioural Problems Checklist (R-MBPC). c) To examine the impact of direct caregiving stressors and nondirect caregiving stressors on caregiver's depressive symptoms (PHQ-9) and care recipient's R-MBPC scores.	Cross-sectional study	(n = 31) caregivers of persons with dementia	Diagnosis activities and relevant data related focuses
Baños-Martín et al. (2017)	To describe the information on the sexuality of patients with mental disorders, admitted to an acute short-stay inpatient unit between 2011 and 2015	Retrospective observational study	(n = 293) clinical histories of patients	Diagnosis activities and relevant data diagnoses interventions related focuses
Brabban et al. (2009)	To test which antipsychotic-resistant patients were most likely to respond to brief cognitive behavior therapy delivered by psychiatric nurses.	Secondary analyses of completer data from a previously published randomized controlled trial	(n = 354) patients aged 18-65 y who had a diagnosis of schizophrenia	Diagnosis activities and relevant data interventions related focuses
Briki et al. <sup>39</sup>	To assess Metacognitive training' short term impact on insight, symptoms, and quality of life	Randomised controlled trial	(n = 50) patients with schizophrenia or schizoaffective disorders and persistent positive symptoms (delusions or hallucinations)	Diagnosis activities and relevant data interventions related focuses
Cankurtaran (2014)	Unknown	Review	Unknown	Diagnosis activities and relevant data interventions related focuses
Carden & Jones (2009)	To support the suggestion that the addition of qualitative data, alongside more empirical assessment data, may further inform the evaluation process of a patient who experiences psychotic symptoms	Single case study	A patient who experiences psychotic symptoms	Diagnosis activities and relevant data interventions related focuses
Chen et al. (2014)	To investigate the efficacy of an organized nonpharmacological intervention program on BPSD among older Chinese men in Taiwan	Prospective cohort study	(n = 92) older men with dementia living in two veterans homes in Taiwan	Diagnosis activities and relevant data interventions related focuses
Cohen-Mansfield et al. (2011)	To describe the delusions experienced by older persons with dementia and the context of occurrence, and to elucidate their etiology	Qualitative and quantitative study	(n = 74) nursing home residents aged 65 and over, diagnosed with dementia, from nine nursing homes in Israel	Diagnosis activities and relevant data diagnoses

(Continues)

Cort et al. (2018)	To provide a clinical overview of very late-onset (after age 60) schizophrenia-like psychosis (VLOSLP), summarizing the literature on treatment options and reflecting on the role of psychiatric-mental health nurses (PMHNS)	Review	Unknown	Diagnosis activities and relevant data interventions related focuses
Erawati et al. (2014)	To explore the influence of individualized metacognitive therapy (MCT) on delusional severity and metacognitive ability	Quasi experimental study	Schizophrenia patients with grandeur delusion and/or paranoid delusions (n = 26) in the intervention group (n = 26) in the control group	Diagnosis activities and relevant data interventions
Favrod et al. (2010)	To test the implementation of the French version of the metacognitive training program and its effects on psychotic symptoms and awareness of the disorder	Uncontrolled pilot study	(n = 18) patients suffering from schizophrenia or schizoaffective disorder with persistent psychotic symptoms	Diagnosis activities and relevant data interventions related focuses
Favrod et al. <sup>40</sup>	To evaluate the efficacy of metacognitive training in reducing delusional ideation compared with treatment as usual	Randomised controlled study	(n = 52) participants fulfilling diagnostic criteria of schizophrenia or schizoaffective disorders and persistent delusions and stabilized antipsychotic medication	Diagnosis activities and relevant data interventions related focuses
Fénelon e Alves (2010)	Unknown	Review	Unknown	Diagnosis activities and relevant data related focuses
Ffytche et al. (2017)	To compare baseline cognitive, biomarker, and other Parkinson disease psychosis risk factor data in patients who go on to develop illusions or hallucinations within 3-4 y of follow-up in the Parkinson's Progression Markers Initiative cohort of newly diagnosed Parkinson Disease	Observational multicentre study	(n = 423) newly diagnosed Parkinson disease patients who go on to develop illusions or hallucinations within 3-4 y of follow-up in the Parkinson's Progression markers initiative cohort	Diagnosis activities and relevant data diagnoses related focuses
Friedman (2013)	Unknown	Review	Unknown	Diagnosis activities and relevant data diagnoses related focuses
Garre-Olmo et al. (2010)	To establish a model for grouping the behavioral and psychological symptoms of dementia into clinical syndromes	Observational study	(n = 491) ambulatory patients with Alzheimer's disease of mild to moderate severity.	Diagnosis activities and relevant data
Hölttä et al. (2015)	To investigate the overlapping and distinguishing capability of psychotic symptoms among patients with dementia or with delirium superimposed to dementia, and to clarify their prognostic value	Cross-sectional study	(n = 255) residents with dementia in nursing homes and acute geriatric wards	Diagnosis activities and relevant data related focuses
Isaacson (2015)	To characterize Parkinson's disease psychosis	Review	Unknown	Diagnosis activities and relevant data related focuses
Kales et al. (2014)	a) To define key elements of care for NPS in dementia. b) To construct an approach describing the sequential and iterative steps of managing NPS in real-world clinical settings that can be used as a basis for integrating nonpharmacologic and pharmacologic approaches. c) To discuss how the approach generated could be implemented in research and clinical care.	Multidisciplinary expert panel	Unknown	Diagnosis activities and relevant data interventions related focuses

(Continues)

Levin et al. (2016)	Unknown	Review	Unknown	Diagnosis activities and relevant data interventions related focuses
Liu et al. <sup>22</sup>	To investigate the overall effectiveness of Metacognitive training for delusion in schizophrenia patients from 2007 to 2016, and to investigate the variables of a Metacognitive training study that could influence the effect size	Meta-analysis of randomised controlled trials	(n = 11) studies on the effect of Metacognitive training for delusion	Diagnosis activities and relevant data interventions related focuses
Mairs & Bradshaw (2013)	To increase readers' understanding of the mental and physical health problems experienced by people with psychosis and identify the role of the nurse in addressing these problems	Review	Unknown	Diagnosis activities and relevant data diagnoses interventions related focuses
Mason et al. (2013)	a) To identify theoretical underpinnings of malingering. b) To discuss interview and intervention techniques based on pertinent literature. c) To offer an organized mnemonic to help clinicians easily identify possible malingered psychosis presentations	Theoretical essay	N/A	Diagnosis activities and relevant data interventions
Maust et al. (2017)	To explore the relationship between behavioral and psychological symptoms of dementia and associated caregiver distress with emergency department utilization, inpatient hospitalization, and expenditures for direct medical care	Retrospective cross-sectional study	(n = 332) participants with dementia	Diagnosis activities and relevant data interventions related focuses
Miller et al. (2010)	To provide an overview of Othello syndrome	Literature review and single case study	Review—unknown single case study—n = 1	Diagnosis activities and relevant data diagnoses interventions related focuses
Morris et al. (2016)	a) To examine the effects of occupational therapy delivered by occupational therapists compared with occupational therapy delivered by any other person for people with schizophrenia. b) To determine whether the response differs by specific type, intensity, or duration of occupational therapy.	Review protocol	N/A	Diagnosis activities and relevant data interventions related focuses
Naeem et al. (2008)	To find predictors of good response to CBT in patients with schizophrenia using data from two randomized controlled trials of cognitive therapy for schizophrenia.	Randomised controlled trials	(n = 353) patients with schizophrenia	Diagnosis activities and relevant data interventions related focuses
O'Connor et al. (2009)	To identify psychosocial treatments in reducing psychological symptoms in dementia	Systematic review	(n = 12) English language reports published or in press by February 2008	Diagnosis activities and relevant data interventions
Okura et al. (2011)	To examine the association of neuropsychiatric symptoms with the risk of institutionalization and death	Analysis of longitudinal data	(n = 537) adults aged 71 or older with cognitive impairment drawn from the Health and Retirement Study	Diagnosis activities and relevant data interventions related focuses
Olivera et al. (2011)	To determine the relationship and influence of different variables on the psychiatric symptomatology of older people who reside in the community, as detected by family practitioners	Cross-sectional and multicentre study	(n = 324) patients aged over 65 y, representative of the older people who reside in the community in the province of Huesca	Diagnosis activities and relevant data

(Continues)

Onwumere et al. (2016)	To investigate carer experiences of supporting a relative with delusional beliefs, which involve family members	Qualitative study	(n = 5) parental caregivers	Diagnosis activities and relevant data diagnoses interventions related focuses
Posmontier (2010)	To propose using the Recovery Advisory Group Model of mental illness as a theoretical framework for care of women with postpartum psychosis, to assist midwives in recognizing symptoms, define the role of the midwife in treatment, and learn the importance of becoming part of the psychiatric mental health care team in order to facilitate optimum recovery for women with postpartum psychosis	Theoretical essay	N/A	Diagnosis activities and relevant data interventions related focuses
Rabey (2009)	Unknown	Review	Unknown	Diagnosis activities and relevant data diagnoses related focuses
Rosen et al. (2017)	To explore the association between cumulative exposures, type of traumatic life events, and proximity to the traumatic event and psychosis; the association between traumatic life events and clinical symptomology including specific types of delusions and/or hallucinations; and how qualitative data further inform understanding of complex relationships and patterns of past trauma and symptoms as they unfold over time.	Mixed-methods research study	(n = 97) participants in the quantitative study sample (n = 51) participants with present state psychosis and (n = 46) nonclinical.	Diagnosis activities and relevant data diagnoses
Stiles et al. (2016)	To review what is known about the assessment, diagnosis, treatment, and outcomes of patients with bath salt-induced psychosis.	Comprehensive review and synthesis of research, case reports, and state-level data.	(n = 42) case reports	Diagnosis activities and relevant data interventions related focuses
Tournier et al. (2017)	To assess the efficacy of an animal-assisted therapy (AAT) program in the reduction of neuropsychiatric symptoms in older adults with medium to severe dementia	Pilot study	(n = 11) elderly residents aged 71 to 93 y	Diagnosis activities and relevant data interventions related focuses
Vliet et al. (2012)	To assess frequency parameters of neuropsychiatric symptoms in young-onset Alzheimer's disease over 2 y and investigate whether there are differences compared with late-onset Alzheimer's disease	Prospective cohort studies	(n = 98) young-onset Alzheimer's disease (n = 123) late-onset Alzheimer's disease patients and caregivers	Diagnosis activities and relevant data related focuses
Watkin et al. (2010)	Unknown	Single case study	A patient with acute onset of florid psychotic symptoms	Diagnosis activities and relevant data diagnoses related focuses
Zuidema et al. (2009)	To assess the influence of dementia severity and sex on neuropsychiatric symptoms in demented nursing home patients	Cross-sectional cohort study	(n = 1319) Dutch nursing home patients	Diagnosis activities and relevant data

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**Artigo 4:** «Nursing Process Addressing the Nursing Focus “Hallucination”:  
A Scoping Review»

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# Nursing Process Addressing the Nursing Focus “Hallucination”: A Scoping Review

Clinical Nursing Research

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## Abstract

Although hallucinations are prevalent in psychiatric disorders, such as psychosis or dementia, no studies were to be found in literature about the nursing process addressing the focus “Hallucination”. This literature review, which is integrated with a scoping study framework, was performed to determine a clinical data model addressing the focus “Hallucination”. PRISMA checklist for scoping reviews was followed. From the total of 328 papers found, 32 were selected. The findings of this

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review were summarized according to the nursing process addressing the focus “Hallucination”. These findings led to determine a clinical data model addressing the focus “Hallucination”, comprising the elements of the nursing process. This clinical data model may contribute toward improving nursing decision-making and nursing care quality in relation to a client suffering from hallucination, as well as contribute toward producing more reliable nursing-sensitive indicators.

### **Keywords**

classification, hallucinations, nursing process, psychiatric nursing, review

### **Introduction**

Hallucination has been defined by the International Council of Nurses (ICN) as an apparent registration of sensory stimuli which is not actually present, classified according to the senses, such as auditory, visual, olfactory, gustatory or tactile hallucination (ICN, 2017). It is classified in the ICN (2017) as a nursing focus and a nursing diagnosis.

Even though this phenomenon is typically associated with schizophrenia and psychosis, a cross-national analysis based on 31261 respondents from 18 countries showed the mean lifetime prevalence of ever having a hallucinatory experience, in healthy individuals, was 5.2% (McGrath et al., 2015). Thus, hallucinations can occur not only in psychiatric disorders, but also in many neurological disorders (e.g., Lewy body disease and Alzheimer’s dementia), as well as in patients with eye disease (e.g., Charles Bonnet Syndrome) or even in healthy people (Meppelink, 2015). According to Ballard et al. (2001; Prerost, Sefcik, & Smith, 2014), also patients with delirium have a high incidence of visual hallucinations, over 25%, as well as auditory and tactile false perceptions, over 18% of the time.

People with hallucinations (e.g., auditory hallucinations) require considerable assistance from mental health professionals, such as psychiatric nurses (Petrus, Chun, & Tsun, 2012). However, there have been few practice models to help psychiatric-mental health nurses’ practice in identification and care of people experiencing them (Buccheri, Trygstad, Buffum, Birmingham, & Dowling, 2013). Although this phenomenon (hallucinations) is prevalent, mainly in psychiatric settings (for instance, a lifetime prevalence of 80% was found in 750 patients diagnosed with a schizophrenia spectrum disorder for multimodal hallucinations) (Lim et al., 2016), no published studies were found in the literature about the nursing process related to the focus “Hallucination” (ICN code: 10008635). In spite of some

efforts made in that direction (Herdman & Kamitsuru, 2017; ICN, 2017; Johnson et al., 2012), the lack of research in this domain leads to inadequate knowledge about diagnoses, relevant data and diagnostic activities for the identification of those diagnoses, as well as nursing interventions for people with hallucinations.

The nursing process represents the systematic, rigorous and efficient method of organizing thought processes for effective clinical decision-making, focused on problem solving and the provision of individualized nursing care (Ackley & Ladwig, 2014; Silva, 2011). It is divided into five essential steps: (1) data collection (which includes the identification of the relevant data and the diagnostic activities for identifying the nursing diagnosis), (2) diagnosis, (3) planning (selection of nursing interventions), (4) implementation (application of nursing interventions) and (5) final evaluation (Doenges & Moorhouse, 2010).

The data corresponds to elementary units of information regarding people's health, collected by nurses in order to identify real or potential problems and opportunities for client development. The relationship between different sets of data allows its transformation into information (Silva, 2011). This information is translated into a nursing diagnosis, which is defined by the ICN (2016) as a label given by a nurse to the decision about a phenomenon. In a study performed by Gonçalves, Sequeira, and Silva (2018) aiming to analyse the nurses' records in the Portuguese nursing information systems, hallucination has been documented by nurses as a nursing diagnosis. As a nursing focus/diagnosis, there is a nursing process related to it. A nursing intervention is defined as an action taken in response to a nursing diagnosis, in order to achieve a nursing outcome (ICN, 2016).

The development of nursing clinical data models provides evidence-based data elements related to nursing care (Chow et al., 2015) and allows structuring all the information related to a given concept (International Organization for Standardization, 2015). A nursing clinical data model allows the systematization of the connections between the elements of the nursing process—data, diagnoses and interventions—for a given nursing focus. Considering the aforementioned lack of knowledge in the domain of the nursing process related to “Hallucination”, the development of a clinical data model comprising its elements, that is, a set of data, diagnoses and interventions addressing “Hallucination”, seems relevant. According to some authors (e.g., Sequeira & Sampaio, 2018), that would be an important aid for nurses on the subject of the scientific evidence related to care plans. Furthermore, the existence of clinical data models would help enhance clinical practices, seeing that they could be replicated and eventually improved in other contexts/countries, facilitating the building of consensuses.

## *Significant of this Research*

It seems important to determine a clinical data model comprising the elements of the nursing process centered on the nursing focus “Hallucination”, that is, a set of data, diagnoses and interventions addressing “Hallucination”. This work would provide a strong foundation for nurses’ decision-making in clinical practice and it would certainly improve nursing records related to that focus.

## *Purpose*

The aim of this review was to determine a clinical data model comprising the elements of the nursing process centered on the nursing focus “Hallucination”, that is, a set of data, diagnoses and interventions addressing “Hallucination”.

This scoping review paper provides a summary, explanation and interpretation of the breadth of the currently available qualitative and quantitative evidence that addresses the review questions.

## **Method**

A scoping study framework uses a systematic approach with five distinct steps as detailed below and does not limit the review to only primary research papers, but allows relevant gray literature to also be considered (Arksey & O’Malley, 2005; Peterson, Pearce, Ferguson, & Langford, 2017). This method enables the review to extract divergent data and develop it in a meaningful, transparent and systematic way (Grant & Booth, 2009). Joanna Briggs guidelines for scoping reviews and PRISMA checklist for scoping reviews were followed (Peters et al., 2015; Tricco et al., 2018)—See Supporting file 1 (PRISMA Checklist). The methodological structure used by Ligita et al. (2018) was adopted. The five essential steps are as follows: (1) identifying the research question(s); (2) identifying the relevant studies; (3) study selection; (4) charting the data; and (5) collecting, summarizing and reporting the data.

The following inclusion criteria were used: peer-reviewed research and non-research papers providing information about nursing diagnoses, relevant data and diagnostic activities for the diagnoses, and interventions addressing the focus “Hallucination”; whether written in English, Spanish or Portuguese. Conversely, the exclusion criterion was: papers reporting children or adolescents with hallucinations.

This literature review concentrated on the nursing focus “Hallucination” regardless of the underlying clinical picture. Any type of disease addressed by the articles was included, as long as hallucination was present.

### ***Step 1: Identifying the Research Questions***

By having well-defined research questions, the scope of the studies included will be both practical and effective (Levac et al., 2010). For this review, three research questions were developed: (1) what relevant data and diagnostic activities can lead to nursing diagnoses related to the focus “Hallucination” in adults?; (2) what diagnoses are related to the focus “Hallucination” in adults?; and (3) what nursing interventions can help resolve or diminish the diagnoses related to the focus “Hallucination” in adults?. The option of including only adults in the population was based on the fact that nursing care for children/adolescents with hallucinations can be substantially different to care for adults with this condition.

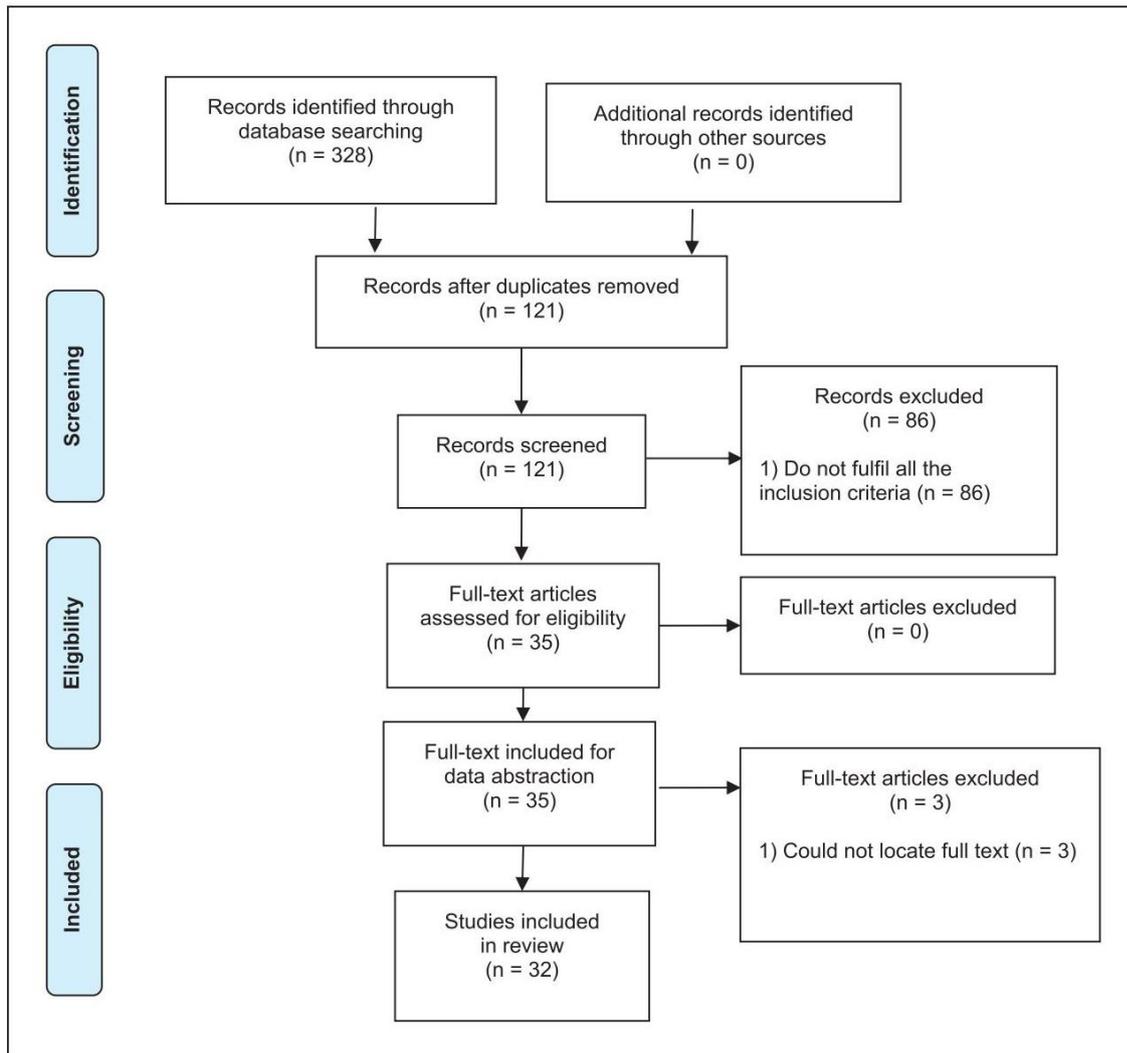
### ***Step 2: Identifying Relevant Published Papers***

Before identifying relevant papers, the authors determined keywords based on the research questions. In this way, electronic databases including MEDLINE, CINAHL (via EBSCOhost) and Web of Science and Scopus were searched using these terms to locate papers that met the inclusion criteria: “hallucination\*” AND “nurs\*” AND (“diagnos\*” OR “intervention\*”) NOT (“child\*” OR “adolescen\*”).

Considering that the limitation to a 5-year period would greatly condition the results and the absence of a time limitation would lead to identifying such a significant number of articles that would make the analysis unbearable, we decided to limit the period to 10 years (2008-2018).

### ***Step 3: Selecting Relevant Papers***

From the search, performed independently by two researchers (PDBG and FMCS), 328 papers were found (all of them written in English). Of this number, 207 papers were duplicates. After removing the duplicates, 121 papers were assessed as meeting the inclusion criteria. These 121 papers were further examined in terms of the inclusion criteria by reading their titles and abstracts. After the full texts were read and assessed against the review questions, 32 papers were considered suitable for inclusion in the final dataset. The selection of relevant papers was based primarily on the research questions, rather than a critical appraisal process. The reviewed research papers’ quality is usually not appraised in a scoping review seeing that the review seeks to encompass the range of all available material (Arksey & O’Malley, 2005; Grant & Booth, 2009). Undertaking detailed methodological critiques of the studies may unduly limit the number of selected papers and, therefore,



**Figure 1.** Search strategy recorded in a flow chart, adapted from Moher, Liberati, Tetzlaff, Altman, and PRISMA Group (2009) Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Arksey and O'Malley (2005) scoping study framework stages.

inappropriately exclude papers that would still provide a wealth of information to answer the research questions; in this way, a wide range of methods and study designs should be included in order to provide an appreciation of the scope or extent of literature available on a thinly researched topic (Arksey & O'Malley, 2005). The procedure used to select the included papers is displayed in Figure 1.

#### Step 4: Data Charting

Each of the included 32 full-text papers was read thoroughly and independently, several times, by two of the researchers (PDBG and FMCS) in order

to obtain all the relevant information. A dataset from the papers was constructed by extracting findings relevant to the questions asked. The dataset was refined regularly by considering whether the extracted data was consistent with the review questions and the study aim. The extracted dataset was categorized using authors, study aims, study design, participants and/or sample, and themes in a practical table (Appendix 1). The design of this dataset was discussed by two of the review authors (PDBG and FMCS) to ensure all relevant information was included.

Quantitative and qualitative data were extracted from papers in the review using another data extraction table, taking into account the review questions, which are in line with the main steps of the nursing process addressing the focus “Hallucination”: data collection for the diagnosis identification (relevant data and diagnostic activities), diagnoses and interventions (see Figure 2). In this process, two researchers (PDBG and FMCS), independently of one another, charted the *first five to ten studies using the data-charting form and met to determine whether their approach to data extraction was consistent with the research question and purpose*, as suggested by Levac et al. (2010, p. 6). Any disagreement was resolved through discussion.

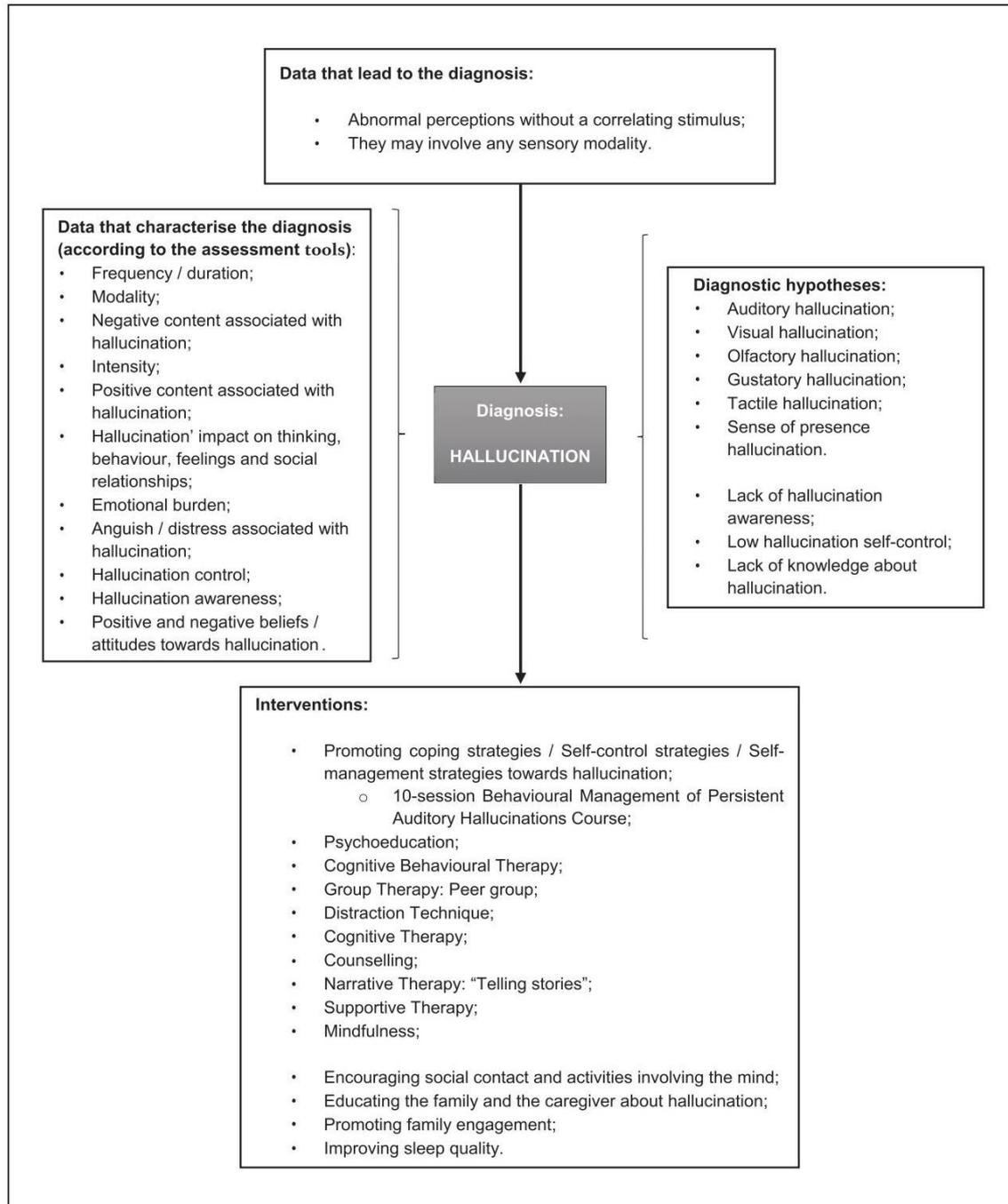
### ***Step 5: Collecting, Summarizing and Reporting of Results***

The key elements of the review questions formed the theoretical framework for the presentation of summary data. Thematic analysis helped to recognize, analyse and narrate patterns identified in the dataset (Braun & Clarke, 2006). The themes, which correspond to the main steps of the nursing process addressing the focus “Hallucination” (relevant data and diagnostic activities, diagnoses, and nursing interventions addressing the focus “Hallucination”), reflect the key concepts of this review and those that allow the questions posed to be answered.

One researcher (PDBG) assigned each study to the predefined themes. That assignment was validated by a second researcher (FMCS). Discrepancies were discussed and resolved. Where appropriate, studies were assigned to more than one theme.

## **Results**

A total of 32 papers were reviewed. At the level of types of articles identified, the analysis pointed to a combination of literature reviews, quantitative, qualitative and mixed studies, of which literature reviews corresponded to 30% of the total number of articles analyzed. The oldest paper was published in 2008



**Figure 2.** Summary of the results.

and the most recent paper was published in 2018. In terms of participants, most studies focused on patients suffering from psychotic disorders and neurodegenerative disorders. Among the clinical studies, sample sizes varied between 13 and 201 participants. Clinical studies were performed in the following locations: United States of America ( $n=4$ ), United Kingdom ( $n=2$ ), Taiwan ( $n=2$ ), Canada ( $n=1$ ), France ( $n=1$ ), Switzerland ( $n=1$ ), Norway ( $n=1$ ), Spain ( $n=1$ ) and Indonesia ( $n=1$ ). The findings of this review were

summarized according to predefined themes which correspond to the main steps of the nursing process (referred to in introduction section) addressing the focus “Hallucination”: data collection for the diagnosis identification (relevant data and diagnostic activities), diagnoses and interventions. The theme most frequently identified in the papers was “Relevant data and diagnostic activities” ( $n=31$ ), followed by “Diagnoses” ( $n=28$ ), followed by “Interventions” ( $n=25$ ).

### *Data Collection: Relevant Data and Diagnostic Activities*

Considering the amount and diversity of obtained data regarding the theme “relevant data and diagnostic activities”, this was subdivided into two themes: data that lead to the diagnosis (hallucination) and data that characterize it. While the former was obtained through the analysis of the term “Hallucination”, the latter was obtained through item analysis of the hallucination assessment tools.

From the analysis of the term “Hallucination”, we extracted the following data that lead to the diagnosis “Hallucination”: the existence of abnormal perceptions without a correlating stimulus, which may involve any sensory modality. In relation to the data that characterize the diagnosis “Hallucination”, it seems to be particularly relevant to assess the frequency/duration of the hallucination, as well as the negative content associated with hallucination.

The assessment tools whose application was found to be relevant diagnostic activities related to the diagnosis “Hallucination” were the Characteristics of Auditory Hallucinations Questionnaire (CAHQ), the Positive and Negative Syndrome Scale (PANSS), the Unpleasant Voices Scale (UVS/0-10), the Psychotic Symptom Rating Scale (PSYRATS), the Beliefs About Voices Questionnaire (BAVQ), the Auditory Hallucination Assessment Scale (AHAS), the Auditory Hallucinations Interview Guide (AHIG), the North-East Visual Hallucinations Interview (NEVHI), the Brief Psychiatric Rating Scale (BPRS), the University of Miami Parkinson’s disease Hallucinations Questionnaire (UM-PDHQ) and the Neuropsychiatric Inventory-Nursing Home Version (NPI-NH).

Of the eight assessment tools identified in the articles for the evaluation of hallucination, four are specifically aimed at evaluating auditory hallucination and one at evaluating visual hallucination. As mentioned before, data that characterize hallucination were obtained through item analysis of the hallucination assessment tools. Frequency/duration and negative content associated with hallucination were the most frequent characteristics identified in the assessment tools, followed by intensity. Positive content associated with hallucination, hallucination’s impact on thinking, behavior, feelings and social

relationships, anguish/distress associated with hallucination and hallucination control are also important when characterizing hallucination.

### *Diagnoses*

In as far as concerns the nursing diagnoses related to the focus “Hallucination”, results were obtained regarding types of hallucination. At this level, the following types of hallucination were identified: “Auditory hallucination”, “Visual hallucination”, “Olfactory hallucination”, “Gustatory hallucination”, “Tactile hallucination”, and “Sense of presence hallucination”. “Auditory hallucination” and “Visual hallucination” were those more commonly referred to in the literature.

Furthermore, some diagnoses which comprise two nursing focuses were also found, and those also seem to be extremely relevant for the nursing process addressing the focus “Hallucination”. In this way, diagnoses such as “Lack of hallucination awareness” (focuses: “Hallucination” and “Awareness”), “Low hallucination self-control” (focuses: “Hallucination” and “Self-control”) and “Lack of knowledge about hallucination” (focuses: “Knowledge” and “Hallucination”) were also mentioned in the literature and considered in this review.

### *Interventions*

Finally, some nursing interventions that can help resolve or diminish the diagnoses related to the focus “Hallucination” were found. The following set of interventions were identified in this review: “Promoting coping strategies/self-control strategies/self-management strategies toward hallucination”; “Psychoeducation”; “Cognitive Behavioral Therapy”; “Group Therapy: Peer group”; “Distraction Technique”; “Cognitive therapy”; “Counseling”; “Narrative Therapy: Telling stories”; “Supportive Therapy”; and “Mindfulness”.

The most commonly interventions referred in the literature were those related to coping strategies/self-control strategies/self-management strategies in relation to hallucination, psychoeducation and cognitive behavioral therapy.

Figure 2 presents a schematic summary of the results.

## **Discussion**

The current scoping review is the first to explore the nursing process addressing the focus “Hallucination”, leading to determine a clinical data model related to it. In this way, information about relevant data and diagnostic activities,

diagnoses, and nursing interventions related to the focus “Hallucination” has been described, responding to the review questions.

### *Data Collection: Relevant Data and Diagnostic Activities*

The data that lead to the diagnosis “Hallucination”, if analyzed in detail, are the definition of “Hallucination” per se. In fact, they are in line with classic literature too, in which hallucinations are defined as intimate convictions of actually perceiving a sensation for which there is no external object (Waters & Fernyhough, 2017). The data that characterizes the diagnosis, such as frequency/duration and the impact of hallucinations on thinking, behavior, feelings and social relationships, are also in line with the literature. In this way, for instance, a randomized controlled trial carried out by Craig et al. (2018) considered frequency and severity as indicators to evaluate the efficacy of a therapy on hallucinations.

An analysis of the assessment tools used in studies to evaluate hallucination reveals that some of them aimed to evaluate hallucinations only (the CAHQ, the Unpleasant Voices Scale, the BAVQ, the AHAS, the AHIG and the NEVHI), while others sought a more comprehensive symptom evaluation (the PANSS, the Psychotic Symptom Rating Scale, the BPRS, the University of Miami Parkinson’s disease Hallucinations Questionnaire and the Neuropsychiatric Inventory-Nursing Home Version).

According to the clinical studies analyzed, some assessment tools were used in specific medical conditions. For example, the Neuropsychiatric Inventory-Nursing Home version (NPI-NH) was used with patients diagnosed with dementia and the University of Miami Parkinson’s disease Hallucinations Questionnaire (UM-PDHQ) aimed to evaluate hallucinations specifically in patients with Parkinson’s disease. The remaining assessment tools were mostly used with schizophrenia and schizoaffective disorder. No significant differences were found regarding the use of the assessment tools according to professional group or discipline.

Considering the aforementioned information, the findings from this review regarding relevant data and diagnostic activities related to the nursing focus “Hallucination” are supported by other literature.

### *Diagnoses*

At the level of the diagnoses, if we take into account that 60% to 80% of all patients diagnosed with schizophrenia spectrum disorders experience auditory hallucinations (Waters et al., 2014), and a smaller proportion experience visual or other unimodal hallucination (Lim et al., 2016), we can assume the

findings of this review are in line with the literature. However, it is important to underline the absence of terms such as “auditory” or “visual” in the International Classification for Nursing Practice® (ICN, 2017), which makes it impossible for nurses to record these diagnoses so accurately.

In addition to the aforementioned diagnoses, lack of hallucination awareness is another diagnosis frequently related to the nursing focus “Hallucination”. Applied to hallucinations, insight (the term usually used in psychopathology) refers to the awareness of the hallucinatory nature of the experience (Fénelon & Hamdani, 2010). In organic disorders, such as Parkinson’s disease, patients may maintain insight regarding the hallucinatory experiences (Peyser, Naimark, Zuniga, & Jeste, 1998; Telles-Correia, Moreira, & Gonçalves, 2015). However, in psychiatric conditions, such as psychosis, lack of insight is quite common (Lera et al., 2011). Hence, we can assume the findings of this review are in line with the literature.

Another diagnosis found in the literature is “low hallucination self-control”. This seems to be extremely relevant as, although self-care management strategies can decrease or relieve the effects of hallucinations among patients, some of them do not know how to deal with this symptom (Tsai & Chen, 2006).

Considering the aforementioned information, the findings from this review regarding the diagnoses related to the nursing focus “Hallucination” are supported by other literature.

### *Interventions*

Finally, the reviewed literature suggested that promoting effective coping/self-control/self-management strategies toward hallucination is a relevant nursing intervention in this domain. According to Turkington, Lebert, and Spencer (2016), the key problem is that individuals who experience ongoing distress with auditory hallucinations often activate dysfunctional coping strategies as they try to manage these unpleasant experiences. Hence, promoting effective coping/self-control/self-management strategies toward hallucination becomes a key nursing intervention in this domain. Among the intervention “Promoting coping strategies/self-control strategies/self-management strategies in relation to hallucination”, emphasis should be put into “10-session behavioural management of persistent auditory hallucinations course”, a systematized intervention which is referred to in four papers.

The effects of psychoeducation on hallucinations have also been studied and, in accordance with an exploratory study conducted by Shiraishi et al. (2014), brief psychoeducation for schizophrenia (five sessions during the

course of 4 weeks) showed a statistically significant improvement on beliefs about hallucination in terms of malevolence, omnipotence and resistance.

Some interventions, such as Cognitive Behavioral Therapy or Cognitive Therapy, are psychotherapeutic ones. This can be a problem for nurses because, in some countries, they are not allowed to perform this kind of interventions (Horatio: European Psychiatric Nurses, 2012).

Considering the aforementioned information, the findings from this review regarding the interventions related to the nursing focus “Hallucination” are supported by other literature.

### *Strengths*

A strength of this literature review is that the search included English, Spanish and Portuguese language papers. Moreover, as two researchers (PDBG and FMCS) independently carried out all the steps of the review, some bias was avoided and the reproducibility of the search process was enhanced. The evidence found seems to be transferable to other contexts, considering that studies from different regions worldwide were included in the review.

### *Limitations*

There are certain limitations which are inherent to a scoping review approach: (1) the considerable quantity of data generated and (2) the absence of “synthesis”, that is, the relative weight analysis of the evidence found. Furthermore, a systematic evaluation of the quality of the articles included in this review was not carried out. This option was based on the inclusive nature of the review, as we believe that it would be important to provide a wide view about the topic of the study. Finally, the limitation to a period of 10 years constitutes a limitation because it limits the results’ comprehensiveness.

Findings of this review clearly reinforce the need to improve the International Classification for Nursing Practice as some of the diagnoses and interventions cannot be recorded by nurses due to the absence of terms in the classification (e.g., Psychoeducation). Regarding nursing interventions which can help resolve or diminish hallucinations, some of them are psychotherapeutic (e.g., Cognitive Behavioral Therapy); however, in some countries, nurses are not allowed to perform them.

### *Future Works*

The findings of this review led to determine a clinical data model for the nursing focus “Hallucination” comprising the elements of the nursing

process, that is, a set of data, diagnoses and interventions addressing it. In future research, it would be relevant to test the efficacy and effectiveness of that clinical data model in clinical practice, that is, to evaluate if the relevant data effectively leads nurses to the correct diagnoses, if the proposed interventions are, indeed, effective in resolving or diminishing the nursing diagnosis, etc. Before that, carrying out a Delphi study would be important in order to validate, with experts, the content validity of the developed clinical data model and, eventually, to make it more comprehensive with the addition of complementary data.

## **Conclusions**

The findings of this review led to determine a clinical data model for the nursing focus “Hallucination” comprising the elements of the nursing process, that is, diagnoses related to the focus “Hallucination”, relevant data and diagnostic activities for the identification of those diagnoses as well as nursing interventions which can help resolve or diminish them.

Some assessment tools, such as the CAHQ, the PANSS or the Unpleasant Voices Scale, can be used by nurses to help diagnose a hallucination. However, even in the absence of assessment tools, certain characteristics of the hallucination, such as the frequency/duration and negative content associated with hallucination should be assessed. Some diagnoses related to the type of hallucination may be identified by nurses, such as if it is auditory and/or visual. Moreover, they can also identify diagnoses that combine more than one nursing focus (e.g., lack of hallucination awareness). Finally, some interventions seem to be particularly relevant for patients with hallucinatory activity, such as promoting coping/self-control/self-management strategies toward hallucination.

The clinical data model which was determined by virtue of this review may contribute toward improving nursing decision-making and nursing care quality in relation to a client suffering from hallucination, as well as contribute toward producing more reliable nursing-sensitive indicators.

## **Implications for Nursing Practice and Nursing Policies**

The nursing process is a problem-solving method, allowing nurses to address patient problems in a logical and structured way. Given the scarce formalization of this process in the area of mental health, proven by the inexistence of clinical data models in this field, we believe this is an emerging and challenging area nowadays.

The development of nursing clinical data models provides evidence-based data elements related to nursing care and allows structuring all the information related to a given concept (Chow et al., 2015; International Organization for Standardization, 2015). Clinical data models contribute to information exchange, clinical decision support, quality reporting, research and improvement of nursing care quality (Chow et al., 2015). Besides, they provide nurses the opportunity to systematize their body of knowledge and, subsequently, to record it consistently. The clinical data model which was determined by virtue of this review (comprising the elements of the nursing process) may serve as a guideline for nursing care plans for individuals with hallucination.

Goossen, Goossen-Baremans, and Van der Zel (2010) state that a high level of uniformity is necessary when collecting information in order to enable its later use, in particular regarding the production of health indicators that can reveal the contribution of nursing care toward population health. Thus, the wide application of this clinical data model addressing the nursing focus hallucination will contribute to the production of nursing-sensitive indicators.

### **Author Contributions**

Study design: PGBG, FMCS, CACS, MATCPS

Data collection: PGBG, FMCS

Data analysis: PGBG, FMCS

Study supervision: CACS, MATCPS

Manuscript writing: PGBG, FMCS

Critical revisions for important intellectual content: CACS, MATCPS, PGBG, FMCS

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## Supplemental Material

Supplemental material for this article is available online.

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**Supplemental Material**

**Appendix 1: Summary of selected papers**

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Author(s)	Aim	Design	Participants and samples	Theme(s)
Aarsland et al (2009)	To discuss the epidemiology, clinical course, diagnosis, and management of some of the most common neuropsychiatric symptoms in Parkinson Disease: depression, anxiety, apathy, fatigue and psychotic symptoms	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Buccheri et al. (2013)	To describe a tested practice model for teaching self-management of unpleasant auditory hallucinations	Theoretical essay	N/A	Relevant data and diagnostic activities Diagnoses Interventions
Buffum et al. (2009)	To evaluate the implementation of a 10-session behavioural management course for self-management of auditory hallucinations in patients with schizophrenia	Quasi-experimental study	(n = 32) patients within the Department of Veterans Affairs	Relevant data and diagnostic activities Interventions
Burghaus et al. (2012)	To review the prevalence, incidence, pathogenetic concepts and treatment guidelines of neurodegenerative diseases	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions

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	and their association with hallucination.			
Chadwick & Hemingway (2017/2018)	To critically appraise the most recent evidence regarding the effectiveness of investigating the content and meaning of visual hallucinations as a one-to-one therapeutic intervention, and to examine whether and how it can be incorporated into mental health nursing practice	Narrative Review	(n = 5) papers selected for review	Relevant data and diagnostic activities Diagnoses Interventions
Chaix et al. (2014)	To replicate in a French-speaking context previous studies about safety-seeking behaviours and verbal auditory hallucinations in schizophrenia	Cross-sectional study	(n = 28) ambulatory patients followed by the Department of Psychiatry at the Lausanne-Vaud University Hospital and the HorizonSud Foundation in Marsens, Switzerland.	Relevant data and diagnostic activities Diagnoses Interventions
Coffey & Hewitt (2008)	To explore service user and community mental health nurses' views on responses to voice hearing experiences	Thematic content analysis of exploratory interviews	(n = 20) community mental health nurses and (n = 20) service users	Relevant data and diagnostic activities Diagnoses Interventions

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Dechamps et al. (2008)	To explore and determine the clinical figures of behavioural syndromes from the factor structure of the Neuropsychiatric Inventory-Nursing Home version (NPI-NH) in demented and psychotic patients	Observational, cross-sectional study	(n = 163) institutionalised elderly with dementia or psychosis	Relevant data and diagnostic activities
England (2008)	To assess efficacy of time-limited usual psychiatric care + cognitive nursing Intervention in a sample of voice hearers assigned a label of schizophrenia or schizoaffective disorder	Randomised controlled trial	(n = 65) community-dwelling voice hearers' patients	Relevant data and diagnostic activities Diagnoses Interventions
Gerlock et al. (2010)	To describe the implementation of the Harm Command Safety Protocol and the Unpleasant Voices Scale to respond to command hallucinations to harm in the context of the dissemination of a multisite, evidence-based behavioural management course for patients with auditory hallucinations	Experience report	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Goetz (2010)	Unknown	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses

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Haider (2012)	Unknown	Single case study Review	A nonagenarian patient who started reporting hallucinations shortly after being admitted to a long-term care	Relevant data and diagnostic activities Diagnoses Interventions
Hazell et al (2017)	To apply the Normalisation Process Theory model to a secondary mental health context, and test the model using exploratory factor analysis	Cross-sectional study	(n = 201) mental health clinicians working in an NHS mental health trust in the South of England	Interventions
Hazell et al. (2018)	This determine the extent to which symptom-specific cognitive behaviour therapy for voices can overcome the known barriers to accessing cognitive behaviour therapy for psychosis and whether any additional barriers are generated by cognitive behaviour therapy that specifically targets distressing voices	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Hughes (2013)	To explore the current understanding of Charles Bonnet syndrome, its treatment	Literature review	(n = 21) articles	Relevant data and diagnostic activities Diagnoses

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	and the role of mental health nurses in this area			Interventions
Kalhovde et al. (2013)	To contribute to the understanding of how people with mental illness experience hearing voices and sounds that others do not hear in daily life.	Hermeneutic phenomenological study	(n = 14) patients who had been hearing voices and sounds for 2 to 39 years	Relevant data and diagnostic activities Diagnoses Interventions
Khan et al. (2017)	To review the most recent studies about the association of neuropsychiatric complications with Parkinson's disease To highlight the epidemiology, diagnosis, pathophysiology, and treatment of the neuropsychiatric complications, with more emphasis on the pathophysiology of these complications	Literature review	(n = 244) articles	Relevant data and diagnostic activities Diagnoses Interventions
Lenka et al. (2015)	To critically analyse the published studies on the structural and functional neuroimaging in Parkinson Disease patients with visual hallucinations	Literature review	(n = 21) articles	Relevant data and diagnostic activities Diagnoses
Llebaria et al. (2010)	To explore the neuropsychological deficits associated with the different types of visual hallucinations observed in	Prospective study	(n= 57) Parkinson Disease patients (n = 29) with visual hallucinations	Relevant data and diagnostic activities Diagnoses

	Parkinson Disease, from minor hallucinations to well-formed visual hallucinations with loss of insight		(n = 29) without visual hallucinations	
Ma et al. (2016)	To explore social interactions, characteristics, and emotional behaviours to detect changes in auditory hallucinatory beliefs in patients with schizophrenia over a 3-month period	Prospective follow-up study	(n = 189) patients with schizophrenia	Relevant data and diagnostic activities Diagnoses Interventions
Martinez-Ramirez et al. (2016)	Unknown	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Mason et al. (2014)	1) To identify theoretical underpinnings of malingering 2) To discuss interview and intervention techniques based on pertinent literature 3) To offer an organised mnemonic to help clinicians easily identify possible malingered psychosis presentations	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Mosimann et al. (2008)	To develop a reliable, valid, semi-structured interview for identifying and assessing visual hallucinations in older people	Pilot study	(n = 114) older people (n = 80) with visual and/or cognitive	Relevant data and diagnostic activities Diagnoses

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	with eye disease and cognitive impairment		impairment (patient group) (n = 34) without known risks of hallucinations (control group)	
Papapetropoulos et al. (2008)	To quantify the type and presence of hallucinations in a clinic population while controlling for disease factors, depression, anxiety and medication	Pilot study	(n = 70) Parkinson Disease patients	Relevant data and diagnostic activities Diagnoses
Place et al. (2011)	To get mental health nurses listening to voice hearers, by helping them to tell the story of their experience of voice hearing	Experience report	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Resnick et al. (2017)	1) To determine if communities exposed to Evidence Integration Triangle for behavioural and psychological symptoms of dementia communities demonstrate evidence of implementation evaluated by the Reach, Effectiveness, Adoption, Implementation, and Maintenance criteria 2) To evaluate the feasibility, utility, and cost of the Evidence	Randomised clinical trial	(n = 50) nursing home communities	Relevant data and diagnostic activities Interventions

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	Integration Triangle approach in Evidence Integration Triangle for behavioural and psychological symptoms of dementia communities			
Roever et al. (2012)	Unknown	Literature review Case report	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Sivec & Montesano (2012)	To review the literature that addresses the effectiveness of Cognitive Behavioural Therapy for Psychosis, including particular areas of emphasis and practice elements associated with this approach	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Suryani et al. (2013)	To identify the experience of auditory hallucinations as articulated by Indonesians diagnosed with schizophrenia	Phenomenological study	(n = 13) participants between 19 to 56 years of age who have been diagnosed with schizophrenia and have experienced auditory hallucinations	Relevant data and diagnostic activities Diagnoses Interventions
Woo et al. (2014)	Unknown	Case report	An 85-year old ethnic Chinese	Relevant data and diagnostic activities

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			woman with a history of transient ischemic attacks and chronic bilateral hearing impairment, who experienced an acute onset of left unilateral musical hallucinations	Diagnoses
Zahodne et al. (2008)	Unknown	Literature review	Unknown	Relevant data and diagnostic activities Diagnoses Interventions
Yang et al. (2015)	To examine the effectiveness of an auditory hallucinatory symptom management program in patients with chronic schizophrenia	Quasi-experimental design	(n = 58) people experiencing schizophrenia with auditory hallucinations from psychiatric inpatient rehabilitation wards in northern Taiwan (n = 29) in the experimental group (n = 29) in the control group.	Relevant data and diagnostic activities Diagnoses Interventions

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**Artigo 5:** «Building nursing clinical data models addressing delusion and hallucination with Meleis Transitions Theory as the theoretical reference model: A focus group study»

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**TITLE: Building nursing clinical data models addressing delusion and hallucination with Meleis Transitions Theory as the theoretical reference model: A focus group study**

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All authors listed meet the authorship criteria according to the latest guidelines of the International Committee of Medical Journal Editors. All authors are in agreement with the manuscript.

**Author Contribution:**

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Data analysis: PGBG

Study supervision: CACS, MATCPS

Manuscript writing: PGBG

Critical revisions for important intellectual content: CACS, MATCPS, PGBG, AAPS

**Ethical Approval**

This study was approved by the Scientific Technical Council of the Oporto Nursing School, (no. 25/2016 of 06/27), which encompassed the role of Ethics Committee.

**Declaration of Conflicting Interests**

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**Building nursing clinical data models addressing delusion and hallucination with Meleis Transitions Theory as the theoretical reference model: A focus group study**

**ABSTRACT**

Experiencing delusions and hallucinations may lead to a transition, requiring the individual to implement a set of strategies that support the adaptation to their new condition. This study aims to build the final clinical data models regarding the nursing focuses 'Delusion' and 'Hallucination' with Meleis Transitions Theory as the theoretical reference model. A qualitative descriptive design was adopted, using two focus groups (one involved the participation of specialists in the representation of nursing knowledge and the other involved the participation of specialists in mental health and psychiatric nursing). The clinical data models obtained by this study permit the systematization of the connections between elements of the nursing process for 'Delusion' and 'Hallucination', constituting clinical guides for care planning and decision-making regarding these areas. They recognise a perspective centred on the client's transition, in which the nursing diagnoses are centred on a set of skills that the client must acquire in order to be able to manage delusion and hallucination, and the nurse's interventions focus on helping the client to develop these skills. These clinical data models may contribute towards the improvement of nursing information systems and the production of more reliable nursing-sensitive indicators.

**Keywords:** Psychiatric nursing; Diagnosis; Intervention; Decision making.

## Highlights

- The clinical data models regarding Delusion and Hallucination recognise a perspective centred on the client's transition;
- This study contributes to the formalisation of the nursing knowledge within the scope of Delusion and Hallucination;
- This study should help enhance clinical practices by supporting decision-making processes by nurses within these areas;
- This study may contribute to the improvement of nursing information systems and the production of more reliable indicators.

## INTRODUCTION

The evolution of Nursing has sought its affirmation as a discipline of knowledge, as a science. As with other professions, nursing requires a knowledge foundation that is based on theories and derived from systematic research (Stolley et al. 2000; Watson 2017). The theories that emerged in the 20<sup>th</sup> century sought to clarify the role of Nursing and what its object of study should be. At the same time, there was an evolution in the content that the nursing schools sought to transmit, progressively emphasizing the importance of care conception and decision making by nurses (Machado 2004). The growing focus on nurses' decision-making process was central to the development of Nursing as a profession and as a discipline of knowledge. As advocated by Ferreira (1981 cit. by Machado 2004), a profession is autonomous when it establishes by itself what its members can do, how they should do it (...) A profession is either autonomous or it is not yet a profession.

The nursing process represents the systematic, rigorous and efficient method of organizing thought processes for effective clinical decision-making, focused on problem solving and providing individualized nursing care (Ackley et al. 2014; Silva 2011). It is divided into five essential steps: (1) data collection, (2) diagnosis, (3) planning, (4) implementation and (5) final evaluation (Doenges & Moorhouse, 2010). The data corresponds to elementary units of information regarding people's health, collected by nurses in order to identify real or potential problems and opportunities for client development. The relationship between different sets of data allows its transformation into information (Silva, 2011). This information is translated into a nursing diagnosis, which is defined by the International Council of Nurses (ICN 2016) as a label given by a nurse to the decision about a phenomenon. A nursing intervention is defined as an action taken in response to a nursing diagnosis, in order to achieve a nursing outcome (ICN, 2016).

The development of a nursing clinical data model allows the systematization of the connections between the elements of the nursing process – data, diagnoses and interventions – for a given nursing focus. Clinical data models enable knowledge representation by the experts of a specific area (Spigolon et al. 2012), in this case, by nurses (Silva 2006), and allow structuring all the information related to a given concept (International Organization for Standardization, 2015). They provide evidence-based data elements related to nursing care, which may contribute to information exchange, clinical decision support, quality reporting, research, and the improvement of nursing care quality (Chow et al. 2015).

Nursing progressed from an executive logic-based method to an approach centred on care planning and decision-making by nurses. The way care is documented has also evolved in this direction, so the emphasis initially devoted to the mere production of documentary evidence of the actions carried out by nurses has been transferred to the necessary information for sustained and effective clinical decision-making. Thus, the development and incorporation of clinical data models that represent the “core” concepts of the Nursing discipline, organized and structured based on the available formal knowledge, specifically in the area of mental health and psychiatry, will support nurses in making better decisions, more congruent with the client specific needs.

Gonçalves et al. (2019)<sup>1</sup> and Gonçalves et al. (2019)<sup>2</sup> developed scoping reviews which aimed to identify relevant data, diagnoses and interventions related to the nursing focuses ‘Delusion’ and ‘Hallucination’. This study aims to explore and obtain contributions regarding the data, diagnoses and interventions related to ‘Delusion’ and ‘Hallucination’, identified in these previous scoping reviews and, hence, to reach the final clinical data models addressing these important nursing focuses. Delusion has been defined by the ICN as an impaired belief: a false sense of reality that cannot be corrected by reason, argument, or persuasion or by evidence of one’s own senses (ICN 2017). Hallucination, on the other hand, has been defined as an apparent registration of sensory stimuli which is not actually present, classified according to the senses, such as auditory, visual, olfactory, gustatory or tactile hallucination (ICN 2017).

According to Meleis Transitions Theory, Nursing focuses on facilitating the individual's transition process (Meleis et al. 1994; Meleis et al. 2000; Meleis 2007; Meleis 2010). This perspective of Nursing presents us with a fundamental concept, which is assumed as a reference in this investigation: the concept of Transition. Transition is a passage or a movement from one state, condition or place to another (Meleis et al. 2000). Throughout life, people continuously experience changes and transitions, which lead to the development of new relationships, new behaviours and new perceptions about themselves. The diagnoses ‘Delusion’ and / or ‘Hallucination’ may lead to experiencing a transition, requiring the individual to implement a set of strategies that support the adaptation to the new condition. It is with this vision in mind that Meleis Transitions Theory is seen as the conceptual framework / theoretical reference model of this work.

## **Aim**

This study aims to explore and obtain contributions regarding the data, diagnoses and interventions related to 'Delusion' and 'Hallucination', identified in two scoping reviews performed beforehand and to build the final clinical data models related to the nursing focuses 'Delusion' and 'Hallucination'.

## **METHOD**

The area of clinical data models has assumed particular importance in Portugal, in the *[Institution]*, which formed the Nursing Informatics Systems Research & Development Centre (Centro de Investigação e Desenvolvimento dos Sistemas de Informação em Enfermagem – CIDESI), accredited by the ICN in 2010. Within CIDESI, an international project was started, currently called *NursingOntos*, which aims to develop an Ontology in Nursing and Clinical data models – archetypes – that can be executed on the nursing information systems back end. An Ontology is different from a classification because it has a reference model that sustains it. This reference model determines what integrates and what does not integrate the Ontology and it prevents the existence of chaos in the integration of new concepts and their relations. This project theoretical reference model is Meleis Transitions Theory. The present study arose in the context of this project.

As mentioned before, the results of two previous scoping reviews constitute the basis of this study. In Table 1, we present the main results of the scoping review addressing "Delusion" – Data, diagnoses and interventions addressing the nursing focus "Delusion". In Table 2, we present the main results of the scoping review addressing "Hallucination" – Data, diagnoses and interventions addressing the nursing focus "Hallucination".

## **Focus Groups**

Two focus groups were formed in order to explore and obtain contributions regarding the data, diagnoses and interventions related to 'Delusion' and 'Hallucination' (presented in Tables 1 and 2). The first had the participation of eleven nursing professionals, specialists in the field of the representation of nursing knowledge, Nursing Information Systems, Ontology and Clinical data models

**Table 1:** Delusion' scoping review main results (Data, diagnoses and interventions addressing delusion), Gonçalves et al. 2019<sup>1</sup>

Data	Diagnoses	Interventions
<p><b>Data that lead to the diagnosis:</b></p> <ul style="list-style-type: none"> <li>• Beliefs or ideas that cannot be changed through logic and reason, maintained despite evidence of the contrary</li> <li>• Unshakeable false beliefs</li> </ul> <p><b>Data that characterise the diagnosis:</b></p> <ul style="list-style-type: none"> <li>• Delusion' impact on thinking, behaviour, feelings and social relations</li> <li>• Delusion conviction</li> <li>• Delusion systematisation</li> <li>• Delusion persistence / duration</li> <li>• Delusion insight</li> <li>• Preoccupation associated with delusion</li> <li>• Delusion fixity / crystallisation</li> <li>• Anguish associated with delusion</li> </ul>	<p><b>Diagnosis:</b> Delusion</p> <p><b>Diagnostic hypotheses:</b></p> <ul style="list-style-type: none"> <li>• Lack of delusion awareness</li> <li>• Lack of knowledge about delusion</li> </ul>	<p><b>Interventions:</b></p> <ul style="list-style-type: none"> <li>• Cognitive Behavioural Therapy</li> <li>• Metacognitive Training</li> <li>• Psychoeducation</li> <li>• Cognitive Remediation Treatment</li> <li>• Dialectical Behaviour Therapy</li> <li>• Occupational therapy delivered by nurses</li> <li>• Organised program of music therapy, art therapy, cognitive activities, orientation training and exercise</li> </ul>

**Table 2:** Hallucination' scoping review main results (Data, diagnoses and interventions addressing hallucination), Gonçalves et al. 2019<sup>2</sup>

Data	Diagnoses	Interventions
<p><b>Data that lead to the diagnosis:</b></p> <ul style="list-style-type: none"> <li>• Perceptions which are not generated by external stimuli</li> </ul> <p><b>Data that characterise the diagnosis:</b></p> <ul style="list-style-type: none"> <li>• Frequency / duration</li> <li>• Negative content associated with hallucination</li> <li>• Intensity</li> <li>• Positive content associated with hallucination</li> <li>• Hallucination' impact on thinking, behaviour, feelings and social relationships;</li> <li>• Anguish / distress associated with hallucination</li> <li>• Hallucination control</li> <li>• Hallucination awareness</li> <li>• Positive and negative beliefs / attitudes towards hallucination</li> </ul>	<p><b>Diagnosis:</b> Hallucination</p> <p><b>Diagnostic hypotheses:</b></p> <ul style="list-style-type: none"> <li>• Lack of Hallucination Awareness</li> <li>• Low Hallucination self-control</li> <li>• Lack of Knowledge about Hallucination</li> </ul>	<p><b>Interventions:</b></p> <ul style="list-style-type: none"> <li>• Psychoeducation</li> <li>• Coping strategies / Self-control strategies / Self-management strategies towards hallucination <ul style="list-style-type: none"> <li>○ 10-session Behavioural Management of Persistent Auditory Hallucinations Course</li> </ul> </li> <li>• Cognitive Behavioural Therapy</li> <li>• Distraction Technique</li> <li>• Cognitive therapy</li> <li>• Counselling</li> <li>• Narrative Therapy</li> <li>• Supportive Therapy</li> </ul>

## **METHOD (continuation)**

in Nursing – **the NursingOntos focus group**. The second was attended by eight nursing professionals who are specialists in Mental health and psychiatric nursing – **the Mental Health Specialists Nurses focus group**. The authors of this work considered that contributions from both these areas (the representation of nursing knowledge and mental health nursing) would be crucial for the development of the clinical data models regarding ‘Delusion’ and ‘Hallucination’. The focus groups were conducted in accordance with the methodological guidelines of Krueger and Casey (Krueger et al. 2014). Consolidated criteria for reporting qualitative studies (COREQ) steered the designing and reporting of this study (Tong et al. 2007).

The following inclusion criteria were applied in order to constitute the NursingOntos group: 1) Masters or PhD in Nursing; 2) Member of the Nursing Informatics Systems Research & Development Centre group (CIDESI group, accredited by the ICN); 3) Prior training in the field of nursing care design or classified nursing language; 4) Present or past participation in research projects in the field of nursing care design or classified nursing language. The following inclusion criteria were applied in order to constitute the Mental Health Specialists Nurses group: 1) Masters or PhD in Nursing; 2) Nurses specialized in mental health and psychiatric nursing working in this area or Professors specialized in mental health and psychiatric nursing teaching in this area.

The focus group meetings (180-minute sessions) included a leader (PDBG) who hosted the meeting, explained its aim, encouraged the exchange of ideas and conducted the registration and observation of the group dynamics. A “questioning route” composed of predetermined and sequenced questions was followed. The focus group questions were as follows: 1) “Should any other data, diagnosis or intervention be added to the clinical data models?” 2) “Should any of the data, diagnoses or interventions presented in the ‘Delusion’ clinical data model be added to the ‘Hallucination’ clinical data model or vice versa?” 3) “Should any of the data, diagnoses or interventions presented in the clinical data models be excluded? If so, why?” 4) Is there any other contribution you would like to make with regard to the data, diagnoses and interventions related to ‘Delusion’ and ‘Hallucination’ clinical data models?

For the purposes of qualitative analysis, discussions were recorded in an audio file after obtaining informed consent from all the participants. Data analysis was performed immediately after the focus

group meetings until data saturation was obtained (after two meetings in the NursingOntos focus group and after one meeting in the Mental Health Specialists Nurses focus group). The data was analysed thematically after transcription of the audiotapes. No software was used for data analysis.

### **Ethical Considerations**

We ensured the confidentiality of all participants and informed that they could at any moment withdraw from the study. Since all participants gave their formal consent, we proceeded with the research. This study was approved by the Scientific Technical Council of the *[Institution]*, (no. 25/2016 of 06/27), which encompassed the role of Ethics Committee, in accordance with the principles of the Declaration of Helsinki and subsequent revisions (World Medical Association 2013).

### **FINDINGS**

In the focus group meetings, the following criteria were identified and later applied to the clinical data models:

#### **Criteria that emerged from the NursingOntos focus group:**

- ✓ The nursing diagnoses 'Delusion' and 'Hallucination' should only be identified if there is an impairment of client functionality associated with delusion and / or hallucination (if there is not, then no problem exists, so there is no nursing diagnosis, because the client is adapted to these conditions);
- ✓ Considering that Meleis Transitions Theory constitutes the conceptual framework / theoretical reference model of this work, the clinical data models should embody the principles of this reference model.
  - From a perspective in which the focus is on the transition of the client, a view geared towards an opportunity to develop clients' potential based on their personal resources should be adopted, as opposed to making reference to their limitations or deficits.

**Example:** The diagnosis "Lack of knowledge about delusion" was converted into "Potential for improving knowledge about delusion".

- Two domains of interventions should be distinguished: 1) The interventions in which the nurse acts directly on the problem (Example: Performing distraction technique); 2) The interventions in which the nurse interferes in the problem only indirectly and through the client (Example: Teaching the client about delusion) – Perspective of the client's transition.
- Meleis Transition Theory allows approaching delusion and hallucination from the perspective of the client's transition. Hence, also the interventions should embody the principles of this reference model, both in content and in semantics.  
*If we, nurses, were able to transform data, diagnoses and interventions into what is intrinsic to us, restructure them according to our own perspective and systematize our professional action in that sense, patients would profit a lot and we would have a great contribution for the society. (NursingOntos focus group, Expert 1)*
- According to Meleis Transition Theory, self-control is always a consequence, an indicator of mastery, therefore, it is not a diagnosis, but an outcome (self-control is a behaviour; the nurse interferes in the process of acquiring mastery, and not in the behaviour that will be observed when mastery is acquired).
- ✓ For an intervention to be formulated, an action verb is required in the beginning of the sentence, thus, interventions should be reformulated in order to fulfill this principle. **Example:** The intervention consisting in “Metacognitive Training” was converted into “Performing metacognitive training”.
- ✓ There must be a univocal relationship between diagnosis and intervention (we cannot have a set of diagnoses for a set of interventions);
- ✓ All contents should be written in accordance to the International Classification for Nursing Practice®.

**Criteria that emerged from the Mental Health Specialists Nurses focus group:**

- ✓ The principle of referential integrity between data, diagnoses and interventions should be adhered to, so any diagnosis should be based on sustained data and any intervention should respond to and have potential to change the respective nursing diagnosis (\*Referential integrity

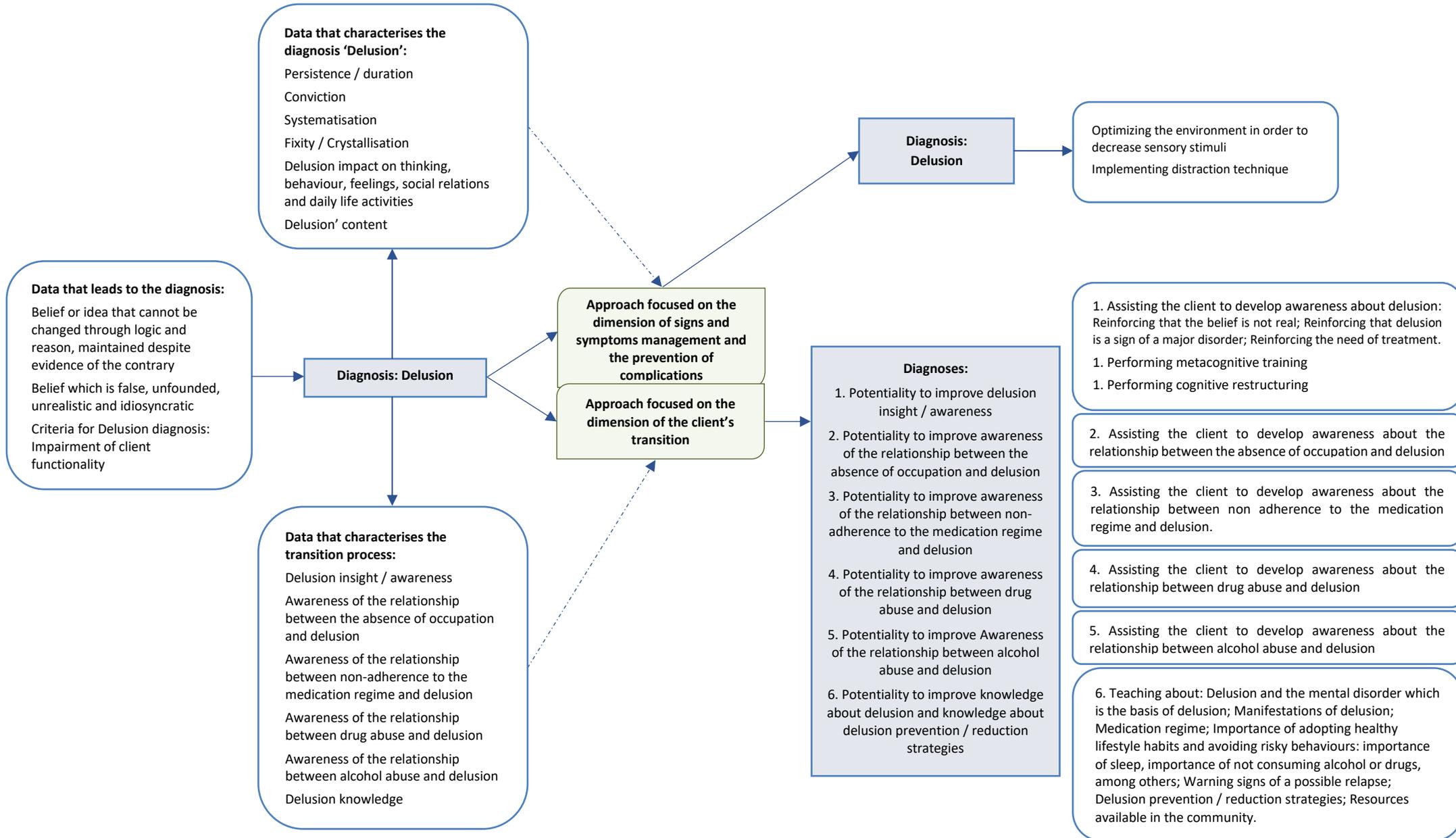
corresponds to the adequate and meaningful relationship between data from different information fields [Silva, 2006]). **Example:** An intervention that consists in “Emotional support” responds to an emotional problem, such as “Anguish associated with delusion / hallucination” (and not to ‘Delusion’ or ‘Hallucination’, because it does not have potential to change delusion or hallucination). For emotional support to be prescribed, an emotional problem must be identified.

- ✓ Any redundant data (which does not add any further information) should be excluded.  
**Example:** The data that lead to the diagnosis ‘Delusion’ “Unshakeable beliefs” was removed, because the data “Beliefs or ideas that cannot be changed through logic and reason, maintained despite evidence of the contrary” already provides that information.
- ✓ In addition to characterising the impact of Delusion and Hallucination on thinking, behaviour, feelings and social relations, the impact of Delusion and Hallucination on daily life activities should be characterised;
- ✓ “Delusional content” should be integrated into the data that characterises ‘Delusion’ (thus, the diagnostic hypotheses regarding Delusion and Hallucination subtypes will be integrated into the data that characterises the diagnosis);
- ✓ The domains “Awareness of the relationship between non-adherence to the medication regime and delusion / hallucination”, “Awareness of the relationship between drug abuse and delusion / hallucination”, “Awareness of the relationship between alcohol abuse and delusion / hallucination” and “Awareness of the relationship between the absence of occupation and delusion / hallucination” should exist in both clinical data models;
- ✓ Interventions that do not represent nursing interventions or whose performance requires specific training (not included in Nursing Specialties) or that are not part of the nurses' autonomous professional practice should be excluded. **Example:** The intervention “Occupational therapy” was excluded.
- ✓ From a perspective in which the focus is not on the transition of the client, the interventions “Optimizing the environment in order to decrease sensory stimuli” and “Implementing distraction technique” should be prescribed. “Administering medication” is also an important intervention in this domain, however, it is not part of the nurses' autonomous professional practice.

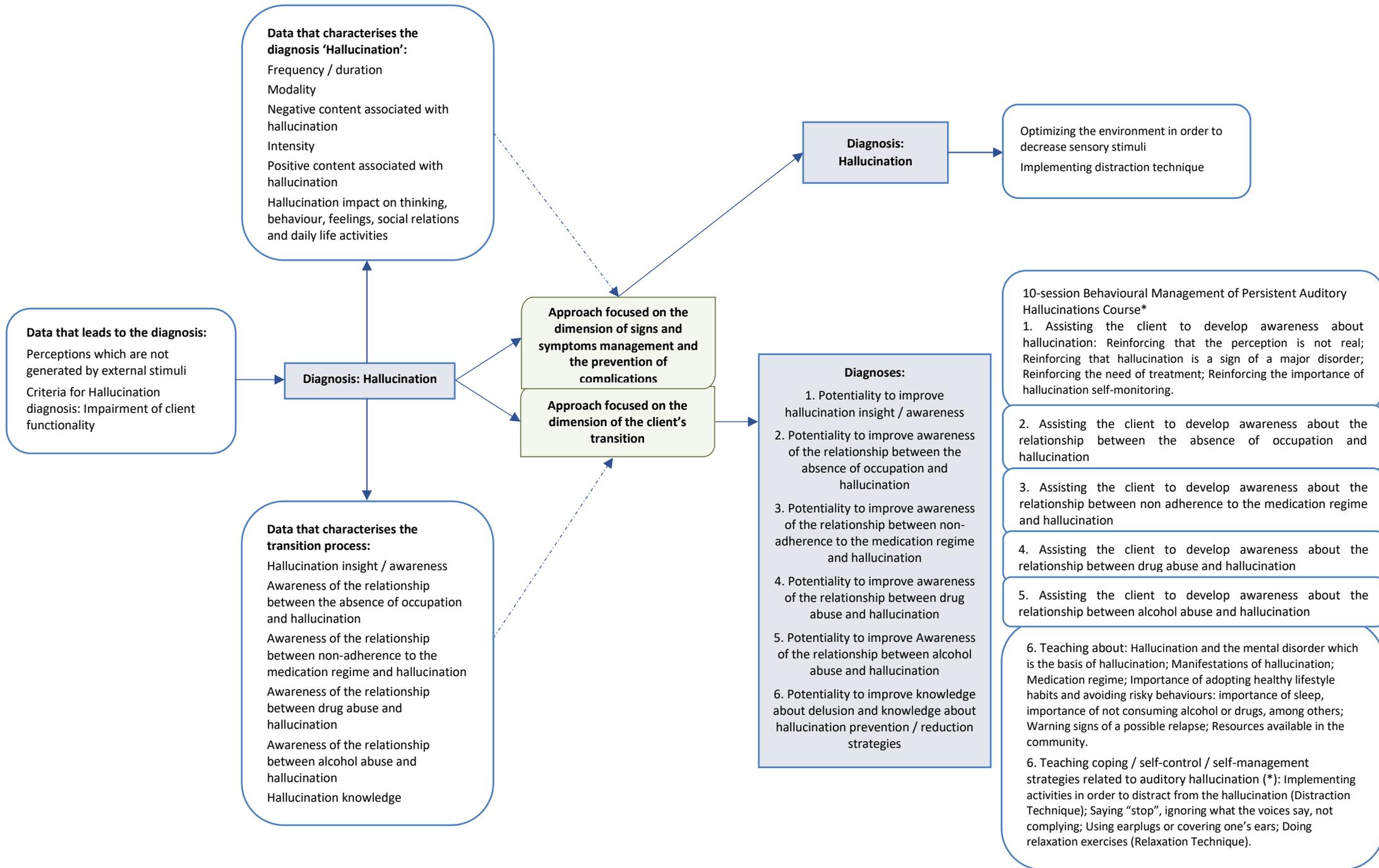
- ✓ When teaching about Delusion or Hallucination, the following contents should be specified:
  - Teaching about: Delusion / Hallucination and the mental disorder which is the basis of Delusion / Hallucination; Delusion / Hallucination manifestations; Medication regime – indications (action of medication on delusion / on hallucination), medication benefits, side effects of medication and strategies to deal with them; Importance of adopting healthy lifestyle habits and avoiding risky behaviours: importance of sleep, importance of not consuming alcohol or drugs, among others; Delusion / Hallucination prevention / reduction strategies; Warning signs of a possible relapse; Resources available in the community.
- ✓ The intervention “Performing cognitive restructuring” should be added to the nursing clinical data model related to ‘Delusion’ (in the approach focused on the perspective of the client’s transition).

After the focus groups meetings, the criteria referred above were applied to the data, the diagnoses and the interventions related to ‘Delusion’ and ‘Hallucination’. Through this process, the final clinical data models regarding ‘Delusion’ and ‘Hallucination’ were obtained. They are presented in Figures 1 and 2. Table 3 shows the contents of the 10-session Behavioural Management of Persistent Auditory Hallucinations Course, an important intervention identified in the Hallucination clinical data model.

**Figure 1: Delusion Clinical Data Model**



**Figure 2: Hallucination Clinical Data Model**



**Table 3:** Contents of 10-session Behavioural Management of Persistent Auditory Hallucinations Course

**\*10-session Behavioural Management of Persistent Auditory Hallucinations Course**  
(Buffum et al. 2009; Buccheri et al. 2013)

**Intervention:**

10 weekly 60' sessions:

- ✓ Sharing the auditory hallucination experiences with the group;
- ✓ Teaching management strategies to the group;
- ✓ Practicing these strategies.
- ✓ **Strategies:**
  - 1) Developing symptom awareness;
  - 2) Hallucination self-monitoring;
  - 3) Distraction technique:
    - Doing other things;
    - Keeping busy with an enjoyable activity and/or helping others;
    - Talking with someone;
    - Reading, listening to music, watching television.
  - 4) Saying "stop", ignoring what the voices say to do, not complying;
  - 5) Using earplugs or covering one's ears;
  - 6) Doing relaxation exercises such as taking deep breaths, relaxing the muscles or listening to relaxing music;
  - 7) Using prescribed medication;
  - 8) Not using drugs or alcohol.

## DISCUSSION

This study allowed the completion of the clinical data models related to the nursing focuses 'Delusion' and 'Hallucination'. The scoping reviews previously performed made it possible to map the concepts related to the data, diagnoses and interventions in the areas of 'Delusion' and 'Hallucination'. The principles established by the focus groups and the theoretical framework that supports this work made it possible to "filter" these concepts and establish the relationships between them, allowing the unique role of Nurses towards a client suffering from 'Delusion' or 'Hallucination' to be envisioned.

Watson (2017, p. 2) emphasises that *any profession that does not have discipline specific language to give voice to its role in society, becomes, and remains invisible; indeed it may not exist*. According to Meleis, Nursing focuses on facilitating the individual's transition process, thus, the role of nurses consists in helping the client to adapt to a new condition and helping them live with it. Bearing this theory in mind, we should consider two different approaches to the client,

according to their potential to improve awareness about the problem, knowledge about the problem and, hence, the ability to cope with, manage and control the problem: 1) Approach focused on the perspective of signs and symptoms management and the prevention of complications, and 2) Approach focused on the perspective of the client's transition.

In the first approach, the client does not have the potential to improve their awareness or their knowledge of the problem and, hence, the ability to cope with, manage and control it. Therefore, the diagnoses will be centred on the problem itself ('Delusion' and 'Hallucination') and the intervention will rely on the nurse's direct action. The nurse will act on the problem and it is the nurse's intervention that will directly influence it. In the second approach, the diagnoses will be centred on the client's potential and will reflect a group of skills they should develop in order to manage delusion and hallucination. The intervention will rely on the client's action (the client himself will act on the problem) and the nurse's role will consist in assisting them to do something, making them aware of something, teaching them something ... helping them to develop the skills to cope with / manage / control delusion and hallucination in order to facilitate their transition.

As the Portuguese Nursing Council (2010) points out, mental health nursing focuses on health promotion, prevention, diagnosis and intervention towards human responses that are not adapted to the transition processes and which generate suffering. The diagnosis of any mental condition may correspond to one of these responses, triggering the experience of a health-disease transition, in which the nurse plays a crucial role. The changes resulting from mental illness, which may appear abruptly or gradually, generate instability and vulnerability and professional nursing action is expected to support the individual in acquiring the skills that allow them to achieve stability again. It is in this sense that Transition is assumed as one of the central concepts of the Nursing discipline (Meleis et al. 1994; Meleis et al. 2000; Meleis 2007; Meleis 2010).

In order to facilitate the client's transition process, nurses should, first of all, evaluate the properties inherent to the transition. One important property of the transition is awareness, which refers to the person's perception and recognition of a changing situation with specific repercussions. The level of awareness is often reflected in the degree of congruence between the knowledge that the person has about their condition and the limitations that it imposes on their daily activities (Meleis et al. 2000). Awareness is crucial in the transition process. If the person is not aware, not

recognising and internalizing the changes that a health problem implies in their life, they will not recognise the need and the importance of the treatment.

In fact, one of the most challenging aspects in psychotic symptoms management is the fact that most clients have limited awareness (insight) of their problem (Liu et al. 2018). It is therefore imperative to reinforce delusion / hallucination awareness. The client will only be able to manage their psychotic symptoms when they develop awareness about them. Metacognitive training for delusion, for example, has proven efficient in improving client awareness about delusion as well as reducing delusion itself. This new treatment modality aims to improve the client's thinking process through the development of their metacognitive skills and insight (awareness) (Moritz et al. 2007; Briki et al. 2014). Also with regard to hallucination, one important strategy related to auditory hallucination management is "developing symptom awareness" (Buffum et al. 2009).

Preparation and knowledge are also essential for a healthy transition. As pointed out by Meleis et al. (2000), the ease or difficulty of the adaptation process will depend on the balance between the requirements associated with the transition and the personal resources. One of the resources that facilitate a healthy transition is the information acquired through health professionals (Meleis et al. 2000). Ma et al. (2016) advocate that mental health and psychiatric professionals should develop intervention programs for clients with auditory hallucination that include promoting clients' knowledge about their voices, teaching them to accept auditory hallucination as a symptom, encouraging them to treat the content of the voices with indifference and developing their coping strategies to deal with this phenomenon.

In fact, awareness and knowledge are fundamental requirements for delusion and hallucination self-management / self-control / coping, which are crucial goals for nurses assisting the client in their transition process. A client cannot achieve self-control in relation to delusion or hallucination if they are not aware of delusion or hallucination or if they do not have the essential knowledge about delusion or hallucination. Self-control is a consequence and is related to the acquisition of mastery (Meleis et al 2000). According to Meleis et al. (2000), one important process indicator in the transition domain, which indicates whether the person is on the path to health or towards greater vulnerability, is the development of trust and the ability to cope. Psychotic symptoms are based on cognitive biases that trigger, worsen or maintain them. Metacognitive training, for example, aims to make clients aware of these cognitive biases, train them to critically detect these distortions and

help them improve their problem-solving repertoire and their delusion management abilities.

Education about coping strategies is provided to the client (Erawati et al. 2014).

Trygstad et al. (2002) addresses auditory hallucination self-control as one of its fundamental domains. Chadwick et al. (2017), in their narrative literature review with the aim of analysing the effectiveness of interventions focused on understanding the experience of hearing voices verified that none of the analysed articles sought to alter or eliminate the auditory hallucination. Instead, they focused on issues such as "learning to live with the voices", "accepting the voices and improving the relationship with them" and "reducing the stress associated with auditory hallucination". Thus, although the auditory hallucination remains, its presence is no longer a problem. This study highlights the importance of interventions that assist the client in understanding and controlling their psychotic symptoms, as well as exploring the hallucinations content and meaning.

In the 1990s, the School of Nursing and Health Professions, University of California, San Francisco (UCSF), developed symptom management strategies to help clients dealing with their symptoms, combining these strategies with behavioural approaches implemented in groups (Buccheri et al. 1996 cit. by Yang et al. 2015). A quasi-experimental study performed by Yang et al. (2015) concluded that the implementation of the Auditory Hallucination Symptom Management Course appears to be effective in improving hallucination self-control.

Finally, the intervention "Performing cognitive restructuring" was added to the Delusion clinical data model. Since 1996, Bouchard et al. (1996) suggested that cognitive restructuring is effective in reducing or eliminating delusions in schizophrenia patients. Cognitive restructuring aims to lead the client to challenge their distorted beliefs and develop new healthy rational beliefs (Johnco et al. 2015). According to the Nursing Intervention Classification, cognitive restructuring aims to reinforce / promote desirable cognitive functioning or change undesirable cognitive functioning, helping the client modify their distorted thought patterns and to look at themselves and the world in a more realistic way (Bulechek et al. 2016).

## **Limitations**

Despite the interesting results obtained by this study, it does bear some limitations. The fact that the focus group with specialists in mental health nursing only met during one session, despite allowing data saturation, did not allow potential variations in the opinion of the experts over time to be perceived. Besides, the lack of an external observer in the focus groups corresponds to a limitation because this did not allow us to obtain data centred on the nonverbal communication of the participants nor on the subliminal messages. The fact that both focus groups were constituted by Portuguese nurses only may represent a limitation, because it did not allow perspectives from different countries or cultures to be considered. Finally, the fact that Meleis Transitions Theory represents the theoretical reference model of this work can be seen both as a strength and as a limitation; a strength because it provides this work with a theoretical reference guide that supports the results, a limitation because using a theoretical framework as a reference may limit the vision through which the results are perceived.

## **CONCLUSIONS**

The clinical data models obtained by this study allow the systematization of the connections between the elements of the nursing process – data, diagnoses and interventions – for the nursing focuses ‘Delusion’ and ‘Hallucination’, constituting clinical guides for care planning and decision-making regarding these nursing focuses. These clinical data models represent the “core” concepts of ‘Delusion’ and ‘Hallucination’, in a Nursing perspective, organized and structured based on the available formal knowledge and they underpin the role of Nursing in relation to a client suffering from these conditions.

## **IMPLICATIONS FOR PRACTICE**

Clinical data models provide evidence-based data elements related to nursing care, which may contribute to information exchange, clinical decision support, quality reporting, research, and the improvement of nursing care quality (Chow et al. 2015).

A high level of uniformity is necessary when collecting information to enable its later use, in particular regarding the production of health indicators that can reveal the contribution of nursing

care for population health. Therefore, a stronger investment in the field of mental health nursing by political stakeholders may be achieved, particularly through the adjustment of nurse-client ratios.

The wide application of clinical data models may contribute to the systematisation and uniformization of information. It may also contribute to the improvement of nursing information systems and semantic interoperability and, therefore, to the production of nursing-sensitive indicators. Furthermore, the existence of clinical data models should help enhance clinical practices by supporting decision-making processes by nurses and improving their clinical reasoning and critical thinking towards the application of the nursing process.

In our opinion, the results obtained from this study are very relevant in international terms, because they provide information for other countries that may allow them to reflect on the decision-making process related to the nursing focuses 'Delusion' and 'Hallucination' in their own national context.

We recommend that further research should be carried out in order to test the applicability of the clinical data models developed in clinical practice and to develop clinical data models addressing other nursing focuses.

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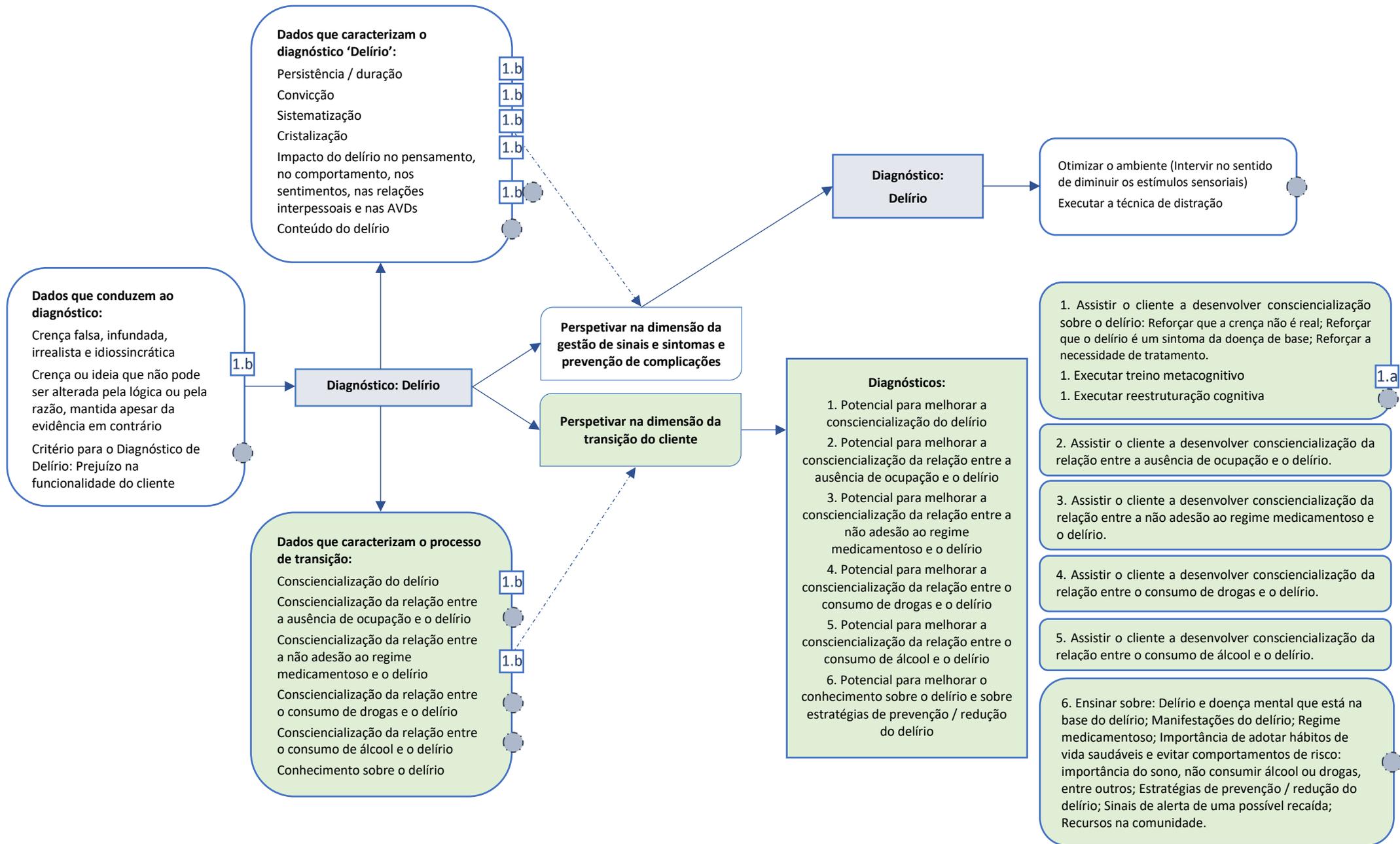
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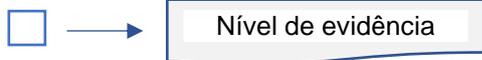
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**Modelos Clínicos de Dados finais com a especificação dos níveis de evidência associados aos itens provenientes da literatura e a indicação dos itens provenientes dos *focus groups* / do modelo teórico de referência**

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**Figura 2: Modelo Clínico de Dados 'Delírio'**





**Legenda:**

Níveis de evidência JBI associados aos dados que conduzem / caracterizam o diagnóstico (*Levels of evidence for Diagnosis*):

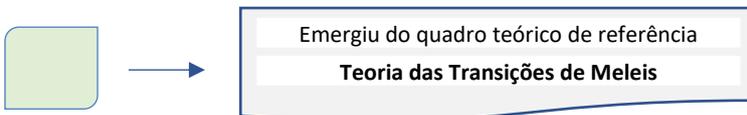
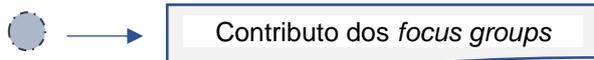
**Level 1.b** – Study of test accuracy among consecutive patients

**Level 2.b** – Study of test accuracy among non-consecutive patients

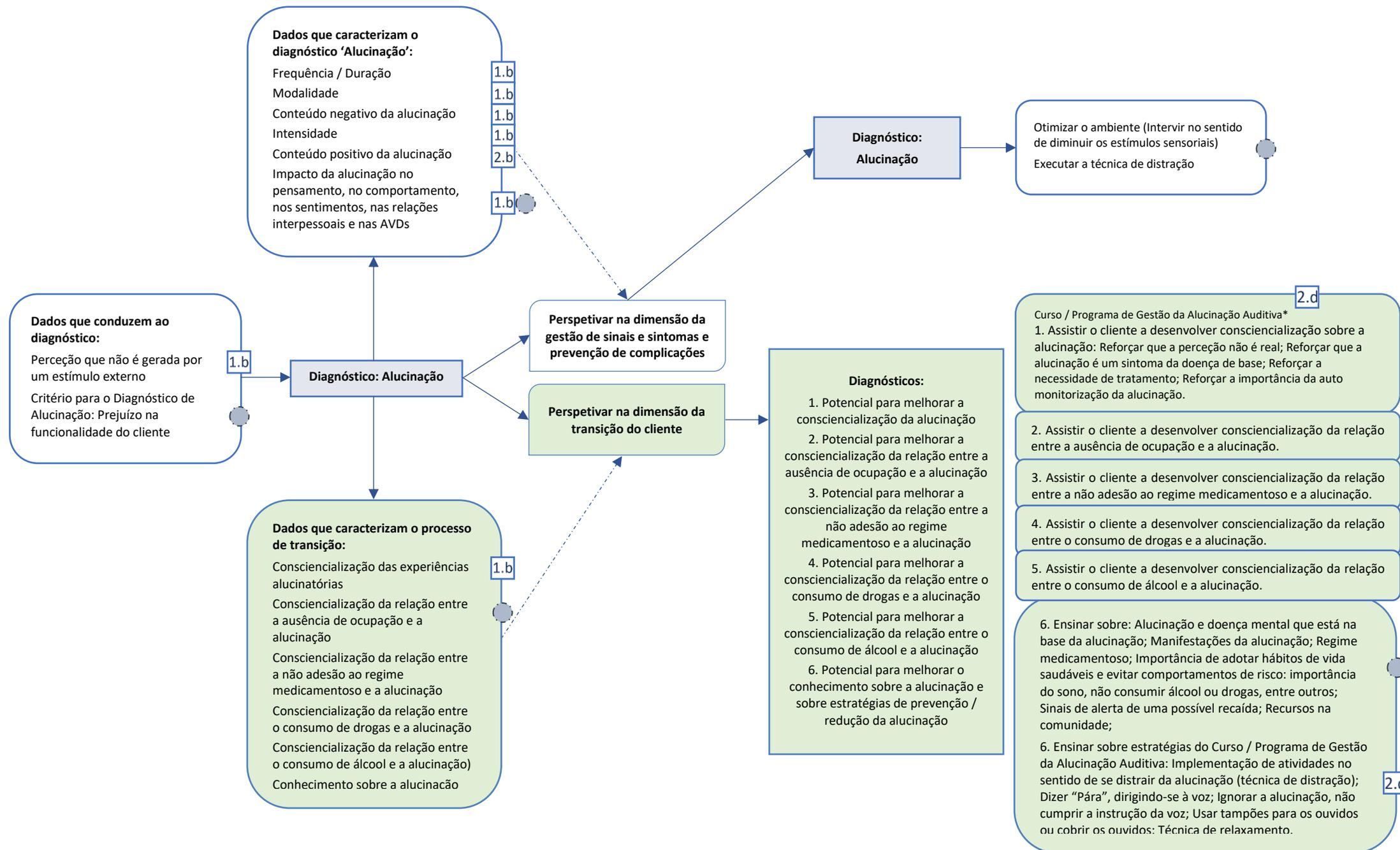
Níveis de evidência JBI associados às intervenções (*Levels of evidence for Effectiveness*):

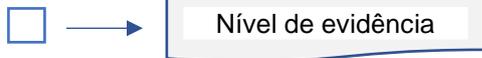
**Level 1.a** – Systematic review of Randomized Controlled Trials (RCTs)

**Level 2.d** – Pre-test / post-test or historic / retrospective control group study



**Figura 3: Modelo Clínico de Dados 'Alucinação'**





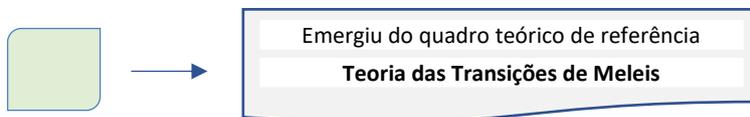
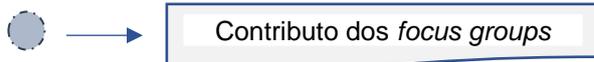
**Legenda:**

Níveis de evidência JBI associados aos dados que conduzem / caracterizam o diagnóstico (*Levels of evidence for Diagnosis*):

- Level 1.b** – Study of test accuracy among consecutive patients
- Level 2.b** – Study of test accuracy among non-consecutive patients

Níveis de evidência JBI associados às intervenções (*Levels of evidence for Effectiveness*):

- Level 1.a** – Systematic review of Randomized Controlled Trials (RCTs)
- Level 2.d** – Pre-test / post-test or historic / retrospective control group study



## Considerações Finais

A primeira fase desta investigação, constituída pelos estudos 1 e 2, permitiu identificar os principais diagnósticos e as principais intervenções parametrizados nos Sistemas de Informação em Enfermagem (SIE), na área da Enfermagem de Saúde Mental e Psiquiatria, em Portugal. Os diagnósticos e as intervenções identificados pelos enfermeiros reportam-se às áreas dos processos psicológicos em geral, da cognição, das emoções e do comportamento.

Um dos aspetos que se evidenciou nestes estudos foi a inconsistência na sistematização da representação dos enunciados dos diagnósticos e das intervenções, apesar da utilização sistemática da Classificação Internacional para a Prática de Enfermagem, o que resultou no uso de uma terminologia variada para descrever o mesmo fenómeno ou a mesma intervenção. Por exemplo, 21 frases de diagnóstico diferentes foram categorizadas como “Abuso de álcool”: “Uso de álcool comprometido”, “Uso de álcool disfuncional”, “Uso de álcool perturbado”, “Uso de álcool aumentado”, “Uso de álcool excessivo”; entre outras. Nas intervenções de Enfermagem, diferentes verbos de ação foram utilizados para documentar ações que, na prática, muito dificilmente se distinguem. Por exemplo, no âmbito do foco de Enfermagem ‘Humor’, os enfermeiros identificaram as intervenções “Avaliar o humor”, “Vigiar o humor”, “Observar o humor”, “Supervisionar o humor”, “Analisar o humor”, “Monitorizar o humor”, entre outras.

Verificou-se uma redundância conceptual na documentação dos diagnósticos e das intervenções de Enfermagem de Saúde Mental e Psiquiatria, que resultou na existência de um grande número de diferentes descrições para expressar o mesmo fenómeno ou a mesma intervenção (dispersão semântica sem qualquer utilidade clínica).

O uso de uma linguagem comum para descrever os passos do processo de Enfermagem é um requisito essencial para a construção, a representação e a formalização do conhecimento em Enfermagem. A linguagem é a base da nossa compreensão comum. Assim sendo, ela deverá traduzir os conceitos que são significativos para cada disciplina do conhecimento, neste caso, para a Enfermagem (Thoroddsen et al. 2010). Para além disso, verifica-se um interesse crescente em clarificar a contribuição dos cuidados de Enfermagem para a saúde da população e para a recuperação dos clientes (Morris et al. 2014; Corry et al. 2013). A qualidade da documentação dos cuidados tem um papel preponderante neste domínio. Como salienta Machado (2004, p. 14), *os registos integram*

*a informação relativa à acção e à tomada de decisão dos enfermeiros, contribuindo para a visibilidade do papel dos enfermeiros.*

Um alto nível de uniformização da informação é necessário quando se tem em vista a interoperabilidade semântica e a produção de indicadores de saúde que traduzam os ganhos associados aos cuidados de Enfermagem (Kautz et al. 2006; Goossen et al. 2010). Como preconiza Rutherford (2008), a utilização de uma linguagem uniformizada nos Sistemas de Informação permitirá a existência de grandes bases de dados. A partir dessas bases de dados, padrões baseados em evidência poderão ser desenvolvidos, permitindo a avaliação da contribuição dos enfermeiros para os ganhos em saúde dos clientes. A primeira fase desta investigação pode constituir um importante contributo para a uniformização da linguagem utilizada para descrever os diagnósticos e as intervenções de Enfermagem na área da Saúde Mental e Psiquiatria.

É importante salientar que a inexistência de uma linguagem comum pode não representar, unicamente, um problema na documentação por parte dos enfermeiros, mas, também, uma questão inerente à própria organização e à própria estrutura da CIPE®. Como Sequeira e colaboradores (2018) salientam, uma questão essencial referente à estrutura da CIPE® refere-se ao elevado número de alternativas de diagnóstico e de intervenção que possibilita. Se a utilização da CIPE® não for devidamente regulada, é muito provável que se obtenham múltiplas hipóteses diagnósticas e de intervenção.

Na análise dos resultados destes estudos, destacaram-se outras questões relativas à identificação dos diagnósticos e das intervenções por parte dos enfermeiros que foram alvo de reflexão. No domínio dos diagnósticos verificou-se, em alguns casos, confusão entre os conceitos de diagnóstico de Enfermagem e de foco de atenção, bem como a identificação de dois ou mais juízos contraditórios no mesmo enunciado de diagnóstico, para o mesmo foco de atenção. Para além disso, alguns enunciados de diagnóstico continham dois diagnósticos distintos, não sendo possível identificar o diagnóstico que o enfermeiro pretendeu documentar e, em alguns casos, verificou-se uma incongruência entre o juízo e o foco de atenção identificados. Para além destes aspetos, um número significativo de enunciados de diagnóstico não constituía um problema alvo da intervenção dos enfermeiros. Nestes casos, não foi a integridade da formulação de diagnóstico que esteve em questão, mas a sua utilidade clínica. Se não existe um problema, não existe um diagnóstico de Enfermagem porque não existe a necessidade de intervir. Não se justifica a identificação de um foco que não constitui diagnóstico (problema), não exigindo do enfermeiro a implementação de qualquer intervenção.

No domínio das intervenções, foram identificados quatro grandes tipos de “Intervenção”: 1) Intervenções que representam atividades de diagnóstico, de vigilância ou de avaliação; 2) Intervenções no domínio do “Executar”; 3) Intervenções no domínio do “Informar” e 4) Intervenções tradutoras de um objetivo / de uma intenção. De acordo com o ICN (2016), uma intervenção de Enfermagem deverá produzir um resultado de Enfermagem. Este pressuposto põe em causa a atribuição do título de “Intervenção” a uma atividade de diagnóstico ou de avaliação. Este tipo de ação insere-se na etapa inicial (avaliação inicial) ou na etapa final (avaliação de resultados) do processo de Enfermagem, não na fase do planeamento ou da implementação das intervenções de Enfermagem, que deverão ter impacto no diagnóstico de Enfermagem, produzindo um resultado de Enfermagem. Por outro lado, as intervenções que representam a intenção subjacente à conceção de cuidados, correspondendo a uma meta e não a uma ação, também foram distinguidas. Por exemplo, “Diminuir a ansiedade” representa um objetivo, uma intenção. A intervenção de Enfermagem consistirá, sim, numa ação executada pelo enfermeiro no sentido de alcançar esse objetivo.

É importante salientar que a inexistência de uma diferenciação entre os diferentes tipos de intervenção pode não ter sido devida a uma dificuldade sentida pelos enfermeiros, mas à organização e à estrutura dos próprios sistemas de informação, que não permitiram tal distinção. Estes estudos promovem a reflexão acerca desta mesma estrutura dos SIE, vislumbrando-se a importância de diferenciar os tipos de ação levados a cabo pelos enfermeiros, inserindo-os nos passos adequados do processo de Enfermagem. Groot e colaboradores (2019) corroboram a importância de alinhar os registos de Enfermagem com os passos do processo de Enfermagem.

Foram também identificadas intervenções que correspondem a aspetos globais centrados em “boas práticas”, que não deveriam ter sido alvo de documentação, uma vez que representam propriedades inerentes ao exercício profissional dos enfermeiros, integradas no seu mandato social. Sequeira e colaboradores (2018) salientam a importância de discutir acerca do verdadeiro significado de uma “Intervenção de Enfermagem”, distinguindo este conceito do de “Boas práticas”. Também se detetou a identificação de intervenções incompletas ou demasiado abrangentes, intervenções sem utilidade clínica, intervenções com um conteúdo ambíguo ou incongruente e enunciados de intervenção que não correspondem a intervenções de Enfermagem. Finalmente, em alguns casos, verificou-se uma incongruência entre a intervenção de Enfermagem identificada e o foco de atenção que estava na sua origem.

Os conhecimentos especializados dos enfermeiros são necessários a todos os níveis dos cuidados de saúde. No entanto, em muitas partes do mundo, os dados referentes aos

recursos de Enfermagem e aos cuidados prestados pelos enfermeiros não são suficientes para suportar uma prática baseada em evidência e o desenvolvimento de políticas de saúde capazes de dar resposta à importância do seu papel (ICN 2016). É nesta medida que a documentação se estabelece como uma função fundamental inerente à prática de Enfermagem. É através da documentação dos cuidados que os enfermeiros tornam visível a importância das suas intervenções e o seu contributo para a saúde da população.

Os registos de Enfermagem servem de apoio ao processo de tomada de decisão, permitem a partilha de informação, a promoção da continuidade dos cuidados e a produção de estatísticas e de indicadores (Pereira et al. 2011). A primeira fase desta investigação permitiu identificar e analisar os principais diagnósticos e as principais intervenções na área da Enfermagem de Saúde Mental e Psiquiatria parametrizados nos SIE, em Portugal. Estes estudos poderão contribuir para uma maior uniformização da linguagem utilizada pelos enfermeiros de Saúde Mental e Psiquiatria na definição dos diagnósticos e das intervenções, o que terá impacto na melhoria da comunicação entre diferentes sistemas e aplicações informáticos (interoperabilidade semântica) e na produção de indicadores de saúde capazes de traduzir o contributo dos cuidados de Enfermagem para a saúde da população. Para além disso, estes estudos promovem a reflexão acerca da qualidade dos registos dos enfermeiros e da estrutura dos sistemas de informação. Uma melhoria nestes domínios poderá trazer ganhos para a qualidade dos cuidados de Enfermagem.

O terceiro estudo realizado – duas *scoping reviews* – permitiu identificar a evidência científica disponível relativamente aos dados necessários para o processo de diagnóstico, aos diagnósticos e às intervenções no âmbito dos focos de Enfermagem ‘Delírio’ e ‘Alucinação’. Foram identificados dados que conduzem aos diagnósticos de ‘Delírio’ e de ‘Alucinação’, dados que caracterizam os diagnósticos de ‘Delírio’ e de ‘Alucinação’, instrumentos de avaliação relevantes nestas áreas, os principais diagnósticos e as principais intervenções de Enfermagem.

Relativamente aos dados que conduzem ao diagnóstico, verificou-se que estes constituem a definição de ‘Delírio’ e de ‘Alucinação’ *per se*. Assim sendo, o dado fundamental que leva ao diagnóstico de ‘Delírio’ é a existência de uma crença irreal, que não pode ser alterada pela lógica ou pela razão, e o dado fundamental que leva ao diagnóstico de ‘Alucinação’ é a existência de uma percepção anormal sem um estímulo associado. Podemos refletir acerca do modo como estes dados são recolhidos na prática clínica. A realização dos diagnósticos de ‘Delírio’ e de ‘Alucinação’ exige uma procura intencional de dados: colocar questões, observar o comportamento do cliente. Podemos ter duas situações: 1) Cliente com Delírio ou Alucinação que apresenta um discurso claramente sugestivo de atividade delirante ou alucinatória, por vezes, até, com exuberância comportamental associada

(solilóquios, por exemplo), o que facilita o processo de diagnóstico; 2) Cliente com Delírio ou Alucinação que não apresenta um discurso sugestivo de atividade delirante ou alucinatoria, podendo, ou não, apresentar um comportamento que indicia a existência do diagnóstico, situação que exige percorrer um caminho mais complexo de colheita de dados, de raciocínio diagnóstico.

Para além dos dados que conduzem aos diagnósticos de 'Delírio' e de 'Alucinação', foram identificados dados que caracterizam estes diagnósticos. De acordo com Forgáčová (2008), o delírio é um conceito multidimensional, caracterizado por um conjunto de componentes / dimensões. Este pressuposto encontra-se em linha com os resultados deste estudo, no qual foram identificados importantes dados que caracterizam o diagnóstico de delírio, nomeadamente, o impacto do delírio no pensamento, no comportamento, nos sentimentos e nas relações interpessoais, a convicção do delírio, a sistematização do delírio, a persistência / duração do delírio, a cristalização do delírio, entre outros. Os dados identificados que caracterizam o diagnóstico de Alucinação, como a frequência / duração, a intensidade e o impacto da alucinação no pensamento, no comportamento, nos sentimentos e nas relações interpessoais são corroborados por outros estudos. Por exemplo, um estudo randomizado controlado conduzido por Craig e colaboradores (2018) considerou a frequência e a severidade como indicadores relevantes na seleção do tratamento dirigido à alucinação.

No que diz respeito aos diagnósticos relacionados com os focos de Enfermagem 'Delírio' e 'Alucinação', os resultados das *scoping reviews* indicaram subtipos de delírio, de acordo com o seu conteúdo (delírio persecutório, delírio de grandeza, entre outros), e subtipos de alucinação, de acordo com o sentido que se encontra comprometido (Alucinação visual, alucinação auditiva, entre outros). Refletindo sobre estes diagnósticos, percebemos que eles apenas especificam uma dimensão do delírio (o seu conteúdo) e uma dimensão da alucinação (o sentido que se encontra comprometido). Neste sentido, importa considerar a alternativa de eles constituírem dados a integrar na caracterização do diagnóstico, não hipóteses diagnósticas *per se*. Foram também identificados outros diagnósticos importantes, determinados pela junção de dois focos de atenção, por exemplo, "Consciencialização dificultadora do delírio / da alucinação" (Focos: 'Consciencialização' + 'Delírio' / 'Alucinação') e "Falta de conhecimento sobre o delírio / a alucinação" (Focos: 'Conhecimento' + 'Delírio' / 'Alucinação').

No que diz respeito às intervenções identificadas, podemos destacar o treino metacognitivo dirigido ao 'Delírio' e o Curso / Programa de Gestão de Alucinações Auditivas Persistentes (10 Sessões) dirigido à alucinação. A terapia cognitivo-comportamental também foi identificada como uma intervenção de relevo nestas áreas, no entanto, importa salientar

que se trata de uma psicoterapia. Nesta medida, a sua implementação por parte dos enfermeiros em Portugal não é possível, a menos que possuam uma formação específica para tal (formação não incluída na Especialidade de Saúde Mental e Psiquiatria). Também noutros países estes profissionais não estão autorizados a colocar em prática este tipo de intervenção (Horatio: European Psychiatric Nurses, 2012).

Algumas das intervenções sugeridas pela literatura dirigem-se a quadros clínicos mais abrangentes, que integram o delírio e a alucinação (por exemplo, “pessoa com sintomas psicóticos” ou “pessoa com sintomas comportamentais e psicológicos de Demência”). Uma *scoping review* pretende mapear conceitos, pelo que deve ter uma visão o mais integradora possível dos conteúdos. No entanto, importará refletir sobre o cumprimento do princípio de integridade referencial de algumas intervenções face ao diagnóstico e questionar se algumas das intervenções identificadas representam, verdadeiramente, intervenções de Enfermagem.

Considerando que o delírio e a alucinação representam diagnósticos de Enfermagem, cabe aos enfermeiros definir todo o processo de Enfermagem que lhes é inerente, procurando o papel específico dos Enfermeiros face a estes problemas. Este trabalho pretende estabelecer-se como um passo nesse sentido. O quarto estudo desta investigação contribuiu significativamente para dar estrutura e rumo aos resultados obtidos a partir da literatura, procurando, através de um modelo teórico de referência, evidenciar o papel da Enfermagem nestas áreas.

Os contributos fornecidos pelo grupo de peritos na área da representação do conhecimento de Enfermagem numa Ontologia de Enfermagem (Grupo NursingOntos) tiveram por base os princípios da Ontologia que está a ser desenvolvida, que tem como referencial teórico a Teoria das Transições de Meleis. A Ontologia, por ter um modelo de referência, determina o que deve e o que não deve integrar os MCD, impedindo a existência de caos na incorporação de novos conceitos e na definição das suas relações.

Podemos afirmar que as revisões de literatura realizadas permitiram mapear os conceitos; os princípios da Ontologia e o referencial teórico que a sustenta, por seu lado, possibilitaram “filtrar” estes conceitos e estabelecer as relações entre eles. Estas relações foram determinadas tendo por base uma teoria de Enfermagem, uma visão. A partir desta visão, foi possível estabelecer alguns princípios da tomada de decisão do Enfermeiro, vislumbrando o seu papel face a um cliente com Delírio ou Alucinação. Watson (2017) salienta que qualquer profissão que não apresente uma linguagem específica relacionada com os pilares da sua disciplina e com o seu saber para dar voz ao seu papel na sociedade torna-se e permanece invisível.

Uma das contribuições deste trabalho refere-se ao reconhecimento de duas perspetivas sob as quais a pessoa com delírio e / ou alucinação poderá ser vislumbrada: uma perspetiva centrada na gestão de sinais e sintomas e prevenção de complicações, outra perspetiva centrada na transição do cliente. A primeira perspetiva vislumbra um cliente que, num determinado momento, não apresenta o potencial para desenvolver a consciencialização ou o conhecimento acerca de aspetos centrais para a vivência de uma transição saudável e que, conseqüentemente, não se encontra capaz de assumir o controlo sobre o seu problema de saúde, de gerir ou de lidar com o problema. Esta perspetiva remete-nos, por exemplo, para um cliente em plena descompensação psicótica ou para um cliente com o diagnóstico médico de Demência que experiencia delírios ou alucinações. Em ambos os casos, o papel do enfermeiro centra-se na gestão de sinais e sintomas e na prevenção de complicações, não se vislumbrando um processo de conceção de cuidados centrado na transição do cliente. O cliente não apresenta o potencial para gerir, com mestria, o problema, ou seja, não apresenta as condições necessárias para resolver, adaptar-se ou lidar com o problema. Nesta primeira perspetiva, o diagnóstico de Enfermagem será centrado no problema e caberá ao enfermeiro atuar sobre o mesmo, uma vez que o cliente não apresenta, naquele momento, condições para o fazer. Será a ação do enfermeiro que poderá ter influência sobre o problema. Assim, os diagnósticos a identificar serão 'Delírio' e 'Alucinação' e as intervenções terão como objetivo reduzir a frequência e a intensidade do delírio / da alucinação ou impedir que os mesmos se agravem. Para tal, o enfermeiro vai intervir sobre o problema, através das intervenções "Otimizar o ambiente, intervindo no sentido de diminuir os estímulos sensoriais" e "Executar a técnica de distração". Repare-se que, nesta perspetiva, o domínio de atuação autónoma do Enfermeiro é muito limitado.

A segunda perspetiva, centrada na transição do cliente, baseia-se nos pressupostos da Teoria das Transições de Meleis e representa o maior contributo destes MCD. Esta perspetiva vislumbra um cliente que apresenta o potencial para desenvolver a consciencialização e o conhecimento acerca de aspetos centrais para a vivência de uma transição saudável e, conseqüentemente, o potencial para assumir o controlo sobre o seu problema de saúde, para lidar com ele. Nesta visão, o cliente apresenta o potencial para gerir, com mestria, o problema, vislumbrando-se uma conceção de cuidados centrada no seu processo de transição. Nesta segunda perspetiva, os diagnósticos de Enfermagem serão centrados no potencial do cliente e refletirão um conjunto de competências, tais como a consciencialização e o conhecimento, que ele deverá adquirir para se tornar capaz de gerir o problema. A ação do enfermeiro será indireta, por via de uma intervenção sobre o cliente; será o cliente que, com os próprios recursos, modificará o cenário inicial. O papel

do enfermeiro consistirá em assistir o cliente a realizar algo, assistir o cliente a desenvolver a consciencialização sobre algo, ensinar algo ao cliente. O Enfermeiro estabelecer-se-á, fundamentalmente, como um facilitador do processo de transição do cliente. Esta segunda perspetiva valoriza o domínio de atuação autónomo do Enfermeiro, permitindo-lhe colocar em prática mais conhecimento intrínseco à Disciplina de Enfermagem.

O primeiro passo a dar no apoio ao cliente que vivencia uma transição é avaliar as propriedades que lhe são inerentes. Uma propriedade fundamental da transição é a consciencialização, que se refere à perceção, ao conhecimento e ao reconhecimento, por parte do indivíduo, de uma situação de mudança com repercussões específicas. O nível de consciencialização reflete-se, frequentemente, no grau de congruência entre o conhecimento que o indivíduo tem acerca da sua condição e as limitações que ela impõe na sua vida (Meleis et al. 2000). É um processo fundamental na transição, sem o qual não é possível avançar. Se o indivíduo não está consciencializado, não interiorizando as mudanças que uma situação de doença implica na sua vida, ele não reconhecerá a necessidade e a importância do tratamento.

Um dos aspetos mais desafiantes no tratamento dos sintomas psicóticos prende-se com o facto de que a maioria dos clientes tem uma consciencialização (crítica, *insight*, awareness) limitada ou ausente do seu problema (Lera et al. 2011; Liu et al. 2018). A ausência de consciencialização face ao problema é um dos mais significativos preditores da não adesão ao regime de tratamento. Um fraco *insight* também está associado a uma pior progressão da doença, quer pelo aumento do número de recaídas e hospitalizações, quer pela deterioração do desempenho no trabalho, nas habilidades sociais e, conseqüentemente, na qualidade das relações interpessoais (Amador 2006).

Eisen e colaboradores (1998), no desenvolvimento do instrumento de avaliação Brown Assessment of Beliefs Scale, abordaram a seguinte questão: o delírio é um construto categórico e dicotómico, devendo ser categorizado como presente ou ausente ou, antes, um construto dimensional, com a atividade delirante caracterizada por vários componentes que contribuem para um continuum de *insight* (consciencialização) que abrange um espectro de bom a mau e ausente? Tradicionalmente, o delírio foi considerado um sintoma categórico (presente ou ausente). No entanto, outros autores defenderam uma outra perspetiva. Em detrimento da ideia do “tudo ou nada”, Sacks e colaboradores (1974 cit. por Eisen et al. 1998) demonstraram que os delírios na esquizofrenia formam-se e resolvem-se gradualmente. Eisen e colaboradores (1998) indicam que os delírios podem ser melhor conceptualizados como existindo num continuum de *insight*, que varia entre um bom *insight*, um fraco *insight* e a ausência de *insight*.

O termo *insight* referente à alucinação refere-se à consciencialização da natureza alucinatória da experiência (Fénelon et al. 2010). Ravina e colaboradores (2007), reportando-se à alucinação na doença de Parkinson, referem que, historicamente, existe uma distinção entre alucinações com *insight* mantido, denominadas de “Alucinações benignas”, e aquelas em que o *insight* é perdido, ocasionalmente denominadas de “Alucinações malignas”.

Alguns instrumentos de avaliação usados na área da Saúde Mental e Psiquiatria fornecem dados sobre a consciencialização. O instrumento “Positive and Negative Syndrome Scale” (PANSS) (Kay et al. 1987) define a falta de *insight* relativamente à doença psiquiátrica como a ausência de consciencialização ou de compreensão da própria condição psiquiátrica ou situação de vida. De acordo com este instrumento, a ausência de consciencialização é evidenciada pela incapacidade de reconhecer a doença psiquiátrica passada ou presente e os seus sintomas, pela negação da necessidade de hospitalização ou de tratamento, pela tomada de decisões caracterizadas por uma baixa antecipação de consequências e pela realização de planos, a curto ou a longo prazo, irrealistas. A dimensão G12 do PANSS apresenta um gradiente de ausência de consciencialização que varia entre “Ausente” e “Extremo”. De acordo com esta dimensão, na forma leve de ausência de insight o cliente reconhece a existência de um distúrbio psiquiátrico, mas subestima a sua seriedade, as implicações para o tratamento e a importância de adotar medidas para evitar a recaída; na forma extrema de ausência de insight o cliente nega, de modo enfático, a existência de um distúrbio psiquiátrico, apresentando interpretações delirantes associadas ao tratamento e recusando cooperar com os profissionais de saúde.

O instrumento de avaliação “The Scale to Assess Unawareness of Mental Disorder” (SUMD) avalia a consciencialização referente a algumas dimensões da doença, nomeadamente a presença de doença mental, a necessidade de tratamento e a presença de sinais e sintomas (delírios e alucinações) (Amador et al. 1993; Amador et al. 1994). Uma das dimensões deste instrumento consiste na consciencialização do delírio, na qual é avaliada a capacidade do cliente de determinar a implausibilidade da crença em questão. Outra dimensão deste instrumento consiste na consciencialização das experiências alucinatórias, na qual é avaliada a capacidade do cliente de interpretar a experiência vivenciada como uma alucinação. O instrumento de avaliação Brown Assessment of Beliefs Scale (BABS) (Eisen et al. 1998) refere-se ao *insight* como a consciencialização de que a crença (o delírio) tem como etiologia um problema psicológico ou psiquiátrico.

A preparação e o conhecimento representam um condicionalismo pessoal fundamental para a vivência de uma transição saudável. De acordo com Meleis e colaboradores (2000), a facilidade ou dificuldade no processo de adaptação dependerá do equilíbrio entre os

requisitos associados à transição e os recursos pessoais. Um dos recursos pessoais que propiciam uma transição saudável é a informação adquirida através de profissionais de saúde (Meleis et al. 2000).

Na perspetiva da transição do cliente, os diagnósticos identificados nos MCD desenvolvidos são centrados nestas duas dimensões cruciais: o potencial do cliente para desenvolver a consciencialização e o potencial do cliente para desenvolver o conhecimento. De facto, a capacidade do cliente para gerir e desenvolver controlo sobre o delírio ou a alucinação dependerá, em primeira instância, do desenvolvimento de consciencialização acerca destes problemas e, após, da incorporação dos conhecimentos necessários para dar-lhes resposta.

O treino metacognitivo tem demonstrado ser eficaz na promoção da consciencialização do processo de “criação” do delírio, ao trabalhar a metacognição, de forma a que o cliente entenda que os seus pensamentos podem não corresponder, de facto, à realidade. Esta nova modalidade terapêutica visa consciencializar os clientes dos vieses cognitivos que estão na base das suas crenças, treiná-los para detetar as distorções do processo de pensamento de forma crítica e ajudá-los a melhorar o seu repertório de solução de problemas. O treino metacognitivo tem como objetivo melhorar o processo de pensamento dos clientes, através do desenvolvimento das suas habilidades metacognitivas e do *insight* (*awareness*, consciencialização) (Moritz et al. 2007; Briki et al. 2014). Também para a alucinação, uma importante estratégia a utilizar no âmbito da autogestão da alucinação auditiva é “promover a consciencialização acerca dos sintomas” (Buffum et al. 2009).

Existe, também, um corpo de evidência significativo que salienta a importância de educar os clientes com sintomas psicóticos acerca dos mesmos (McGorry 1995; Aarsland et al. 2009; Posmontier 2010; Rabovsky et al. 2012; Ma et al. 2016). Ma e colaboradores (2016) preconizam que os profissionais de Saúde Mental e Psiquiatria devem desenvolver programas de intervenção para clientes com alucinação auditiva que incluam a promoção do conhecimento acerca das suas vozes, ensinando-os a aceitar a alucinação auditiva como um sintoma, encorajando-os a tratar o conteúdo das vozes com indiferença e desenvolvendo as suas estratégias de *coping* para lidar com este fenómeno.

Buffum e colaboradores (2009) e Buccheri e colaboradores (2013) abordam um modelo prático que objetiva o ensino e o treino de estratégias de autocontrolo de alucinações auditivas desagradáveis – Curso / Programa de Gestão de Alucinações Auditivas Persistentes (10 Sessões), *10 Session Auditory Hallucination Symptom Management Program*. Este Curso / Programa é implementado através de dez sessões semanais de 60 minutos, nas quais se pretende promover a partilha das experiências das alucinações entre

os elementos do grupo e ensinar ao grupo / treinar com o grupo estratégias de gestão das alucinações. As estratégias consistem em: 1) desenvolver consciencialização quanto aos sintomas; 2) auto monitorizar a alucinação; 3) implementar atividades no sentido de se distrair das vozes; 4) falar com outras pessoas; 5) ler; 6) ouvir música; 7) ver televisão; 8) dizer “Pára”, dirigindo-se à(s) voz(es); 9) ignorar a alucinação, não cumprir a instrução da(s) voz(es); 10) usar tampões para os ouvidos; 11) implementar técnicas de relaxamento, nomeadamente pela realização de inspirações profundas, de exercícios musculares ou ouvindo música relaxante; 12) manter-se ocupado com uma atividade agradável ou a ajudar os outros; 13) cumprir o regime terapêutico; 14) não consumir drogas ou álcool. Um estudo quase experimental realizado por Yang e colaboradores (2015) concluiu que a implementação deste Curso / Programa poderá ser eficaz na melhoria dos sintomas da alucinação auditiva em clientes com esquizofrenia.

De acordo com Meleis e colaboradores (2000), um importante indicador de processo da transição que indica se a pessoa se encontra no caminho da saúde ou no sentido de uma maior vulnerabilidade é o desenvolvimento de confiança e *coping*. De facto, o desenvolvimento da capacidade para lidar com, para gerir, para controlar o problema é o resultado esperado numa transição saudável. Tal resultado só poderá ser vislumbrado se a pessoa desenvolver a consciencialização acerca do problema e o conhecimento necessário para lidar com ele. O autocontrolo é uma consequência deste processo e está relacionado com a aquisição de mestria (Meleis et al. 2000).

Trygstad e colaboradores (2002) referem-se ao autocontrolo da alucinação auditiva como uma das suas dimensões fundamentais. Coffey e colaboradores (2007) analisaram entrevistas realizadas a clientes com alucinação auditiva, no sentido de colher dados acerca do modo como eles vivenciavam esta experiência. Uma das necessidades identificadas pelos clientes neste estudo foi a de estabelecer controlo sobre as vozes. Este controlo sobre a alucinação auditiva prende-se com a perspetiva de que “aprender a viver com as vozes”, em vez de eliminá-las, é o mais relevante no tratamento do cliente que vivencia este fenómeno. Neste sentido, a exploração do conteúdo e do significado das vozes é fundamental. Também Chadwick e colaboradores (2017), na sua revisão narrativa de literatura com o objetivo de analisar a efetividade de intervenções centradas na compreensão do conteúdo e do significado da experiência de ouvir vozes, verificaram que nenhum dos artigos analisados procurou reduzir ou eliminar a alucinação. Os artigos analisados centraram-se, antes, em questões como “aprender a viver com as vozes”, “aceitar as vozes e melhorar a relação com elas” e “reduzir o stresse associado à alucinação auditiva”. Neste sentido, apesar de a alucinação auditiva se manter, a sua presença deixa de ser um problema. Este estudo salienta a importância de intervenções

que objetivam a compreensão, por parte do cliente, dos sintomas psicóticos e o autocontrolo dos mesmos, bem como a exploração do conteúdo e do significado da alucinação.

Considerando a importância da qualidade da informação clínica produzida pelos enfermeiros, entendemos que a sistematização desta informação em modelos clínicos de dados é potenciadora de melhores decisões por parte destes profissionais e, conseqüentemente, de melhores cuidados. Os MCD desenvolvidos apresentam a sistematização das conexões entre os elementos do processo de Enfermagem – dados, diagnósticos e intervenções – para os focos de Enfermagem ‘Delírio e ‘Alucinação’, constituindo-se como um importante apoio à tomada de decisão autónoma dos enfermeiros nestas áreas de atenção.

Ao providenciar uma ferramenta que apoia a tomada de decisão, baseada em evidência, por parte dos enfermeiros, o presente trabalho poderá contribuir para a melhoria da qualidade dos cuidados nas áreas em questão. Os MCD desenvolvidos apresentam os principais conceitos referentes aos focos ‘Delírio’ e ‘Alucinação’ e pretendem salientar o papel da Enfermagem face a um cliente que sofre com estes problemas.

Os MCD desenvolvidos evidenciam a invisibilidade de muitos cuidados na prática clínica e nos registos de Enfermagem no contexto da Saúde Mental, cuidados centrados, fundamentalmente, na Transição do cliente, que se reporta a uma dimensão autónoma do exercício profissional dos enfermeiros e que representa a sua natureza específica. Esperamos que a presente investigação contribua para a integração desta dimensão nas práticas e nos registos de Enfermagem.

Os MCD desenvolvidos poderão constituir-se como um instrumento de grande relevo nas áreas em que se inserem, estimulando os enfermeiros de Saúde Mental e Psiquiatria a colocarem em prática mais conhecimento intrínseco à Disciplina de Enfermagem, o que os levará a alcançar uma Enfermagem mais avançada, uma Enfermagem “com mais Enfermagem”. Estes MCD pretendem constituir-se como modelos operativos capazes de aproximar as teorias de Enfermagem expostas ao modelo atualmente em uso.

Um alto nível de uniformização da informação é necessário quando se tem em vista a interoperabilidade semântica e a produção de indicadores de saúde capazes de traduzir o contributo dos cuidados de Enfermagem para a saúde das populações. O desenvolvimento de MCD que apresentam os principais conceitos subjacentes à disciplina de Enfermagem, organizados e estruturados com base no conhecimento formal disponível, pode revelar-se um importante contributo para a sistematização e a uniformização desta informação.

Acreditamos ter alcançado os objetivos inicialmente definidos, numa área que tem, ainda, um longo caminho a percorrer. Que este trabalho se estabeleça como um contributo para esse caminho. O desafio que se coloca consiste em colocar os MCD desenvolvidos em prática, identificando os ganhos em saúde que deles poderão advir e avaliando as suas limitações, vislumbrando pontos de melhoria. Para além disso, recomendamos que se invista no desenvolvimento de MCD referentes a outros focos de Enfermagem. Acreditamos ser este o caminho para uma Enfermagem mais significativa para as pessoas.

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