ICNP® terminology subset for people with tuberculosis

Subconjunto terminológico CIPE® para a pessoa com tuberculose

Subconjunto de terminología CIPE® para la persona con tuberculosis

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ABSTRACT
Objectives: to develop an ICNP® terminology subset to care for people with tuberculosis. **Methods:** a methodological research that followed the following steps: identification and validation of empirical indicators of altered needs relevant to people with tuberculosis based on literature; cross-mapping of the empirical indicators of altered needs identified with ICNP® 2017 terms; construction of nursing diagnoses/outcomes and interventions; assessment of relevance of nursing diagnoses /outcomes and interventions and ICNP® terminology subset structuring. **Results:** an ICNP® terminology subset was developed to care for people with tuberculosis with 51 diagnoses/outcomes and 264 nursing interventions, assessed by nurses from Primary Health Care and structured according to Wanda Horta's Theory of Basic Human Needs. **Final Considerations:** the subset is a technological instrument through which it is possible to identify the elements of nursing practice from the affected human needs.
Descriptors: Nursing; Classification; Terminology; Nursing Process; Tuberculosis.

RESUMO
Objetivos: elaborar um subconjunto terminológico CIPE® para o cuidado à pessoa com tuberculose. **Métodos:** pesquisa metodológica que seguiu as seguintes etapas: identificação e validação de indicadores empíricos das necessidades alteradas relevantes para a pessoa com tuberculose com base na literatura; mapeamento cruzado dos indicadores empíricos das necessidades alteradas identificadas com termos da CIPE® 2017; construção dos diagnósticos /resultados e intervenções de enfermagem; avaliação da pertinência dos diagnósticos / resultados e intervenções de enfermagem e estruturação do subconjunto terminológico CIPE®. **Resultados:** foi desenvolvido um subconjunto terminológico CIPE® para o cuidado à pessoa com tuberculose com 51 diagnósticos/resultados e 264 intervenções de enfermagem, avaliado por enfermeiros da Atenção Primária à Saúde e estruturado segundo a Teoria das Necessidades Humanas Básicas. **Considerações Finais:** o subconjunto é um instrumento tecnológico por meio do qual é possível identificar os elementos da prática de enfermagem a partir das necessidades humanas afetadas.
Descritores: Enfermagem; Classificação; Terminologia; Processo de Enfermagem; Tuberculose.

RESUMEN
Objetivos: desarrollar un subconjunto terminológico CIPE® para la atención de personas con tuberculosis. **Métodos:** investigación metodológica que siguió los siguientes pasos: identificación y validación de indicadores empíricos del cambio de necesidades relevantes para la persona con tuberculosis con base en la literatura; mapeo cruzado de los indicadores empíricos de las necesidades cambiadas identificadas con los términos de CIPE® 2017; construcción de diagnósticos /resultados e intervenciones de enfermería; evaluación de la pertinencia de diagnósticos /resultados e intervenciones de enfermería y estructuración del subconjunto terminológico. **Resultados:** se desarrolló un subconjunto terminológico para la atención de personas con tuberculosis con 51 diagnósticos/resultados y 264 intervenciones de enfermería, evaluadas por enfermeras de Atención Primaria de Salud y estructuradas según la Teoría de Necesidades Humanas Básicas. **Consideraciones Finales:** el subconjunto es un instrumento tecnológico a través del cual es posible identificar los elementos de la práctica de enfermería a partir de las necesidades humanas afectadas.
Descriptores: Enfermería; Clasificación; Terminología; Proceso de Enfermería; Tuberculosis.

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INTRODUCTION

Tuberculosis (TB), even nowadays, leads thousands of individuals to get sick and die, remaining a public health concern worldwide[1]. According to the World Health Organization, 10.4 million people worldwide are infected with TB, of whom 1.7 million died in 2017[2]. In Brazil, there were more than 72 thousand cases and 4.5 thousand deaths in 2018[3]. It is observed that TB remains with significant numbers of cases, even though it is a curable disease and free treatment in Brazil.

For early identification and timely treatment by nurses, updated knowledge, educational interventions with a psychosocial focus, an approach with a psychological and social perspective beyond the biological point of view and using scientific instruments are needed[4-5]. The International Classification for Nursing Practice (ICNP®) terminology subsets are instruments used to identify diagnoses and establishment of outcomes and appropriate nursing interventions, aimed at a specific group of clients[6]. The ICNP® is a standardized terminology that represents the elements of nursing practice worldwide. Its structure is composed of a Seven-Axis Model, which allows organizing nursing diagnosis, outcome and intervention statements, promoting a proper nursing process application[7].

To build and structure a subset, one must be guided by a theory of nursing or other domains[8-9]. Thus, understanding that the needs of people with TB go through the psychobiological, psychosocial and psychospiritual needs, the present study used Wanda Horta's Theory of Basic Human Needs to support the subset, as it proposes that nursing should assist people in meeting their basic needs in order to make it independent of this assistance by teaching self-care[10], respecting their individuality, assisting in their recovery, encouraging their autonomy and returning to their daily activities.

There are some terminology subsets registered with the International Nurses Council (INC) such as hypertension, mental health, dementia in community care, community nursing, disaster nursing, critical care, family process, pediatric pain management and treatment adherence[6,9]. However, a subset aimed at people with TB was not found, despite being considered a priority area for developing subsets by INC.

OBJECTIVES

To develop an ICNP® terminology subset to care for people with tuberculosis.

METHODS

Ethical aspects

The study was approved by the Research Ethics Committee of the Health Sciences Center of *Universidade Federal do Espírito Santo*.

Theoretical-methodological framework

The ICNP® terminology subset structuring was guided by the theoretical model of Basic Human Needs of Wanda de Aguiar Horta, following the development model of Nobrega and collaborators' terminology[9-10].

Type of study and target audience

This is a methodological study referring to the development of an ICNP® terminology subset, which followed COREQ (Consolidated Criteria for Reporting Qualitative Research) in research organization.

The subset's target audience is nurses and nursing students.

Methodological procedures

Study setting

The study was carried out at Graduate Program in Nursing and at Epidemiology Laboratory (LABEPI - *Laboratório de Epidemiologia*).

Work steps

1) Identification and validation of terms related to relevant altered needs for people with TB based on literature.

To develop the first step, a systematic literature search was carried out in order to identify altered needs of people with TB relevant to professional practice. The review was guided by the following guiding question: which empirical indicators of altered needs of people with TB are relevant to nursing practice? The articles were extracted from the Virtual Health Library: Latin American and Caribbean Literature in Health Sciences (LILACS) and Medical Literature Analysis and Retrieval System Online (MEDLINE) databases using the Health Science Descriptors (DeCS) "Tuberculosis" and "Nursing" through the Boolean operator AND.

Articles with abstracts available in the databases, in Portuguese, English or Spanish and published between 2009 and 2018 were included. Papers presented at congresses, dissertations, monographs, theses, letters to the editor, reflection studies and articles on other topics or on TB unrelated to nursing were excluded.

Thus, 119 articles were found in LILACS and 123 in MEDLINE, whose titles and abstracts were read by two researchers and the inclusion and exclusion criteria were applied; with disagreement, it was decided by consensus, reaching the selection of 24 articles. After reading the articles, all excerpts that presented altered needs were highlighted through the identification of stressful, conscious or unconscious conditions resulting from hemodynamic imbalances fundamental to life and that can affect human beings' balance[10].

After extracting the empirical indicators of altered needs of people with TB, they were decomposed into simple terms (e.g., noun, verb) or compound terms (e.g., adverbial phrases, verbal phrases, compound nouns) and organized in alphabetical order in Excel spreadsheets. These terms were submitted to validation by two specialist nurses: the first nurse had twenty years of experience in assisting people with TB and held a PhD in TB; the second had five years of experience assisting people with TB and specializing in Family Health Strategy. The specialists were asked to select the terms that represented the empirical indicators of altered needs in their practice in caring for people with TB. In this step, the criteria were considered: Agree: yes or no. Disagreements were sorted out through consensus.

2) Cross-mapping of altered needs identified with ICNP® 2017 Focus Axis terms[11].

In this step, a manual spreadsheet cross-mapping of all terms extracted in the first step with ICNP® 2017 Seven-Axis Model terms was carried out[11]. Constant and non-constant terms were identified, organized in alphabetical order, excluding synonyms and repetitions. Then, the terms not included in the ICNP® Seven-Axis Model were submitted to analysis for similarity and comprehensiveness following the criteria, which establish: if an ICNP® term is similar to the identified term, i.e., when it does not have the same spelling, but the meaning is the same; if a term is more comprehensive, when it has a greater meaning than the existing term in the ICNP®; if the term is more restricted, when it has less meaning than the present in the ICNP®; and, finally, if there is no agreement, when the term is totally different from the term in the ICNP®[9]. This step resulted in a bank of nursing language terms related to caring for people with TB, which was used to construct nursing diagnosis, outcome and intervention statements following the recommendations of INC[8] and ISO 18.104: 2014 - Informatics in Health: categorical structures for the representation of nursing diagnoses and nursing actions in terminology systems[11-12].

3) Construction of nursing diagnosis/outcome and intervention statements.

In this step, the construction of the statements of nursing diagnoses, outcomes and interventions was carried out in accordance with the INC recommendations. For each diagnosis, a Focus axis term and a Judgment axis term were used, and other terms could be added depending on the need and specificity of Judgment, Client, Location, and Time axes. For each Intervention, an Action axis term and a Target term were used, considered as a term of any of the axes, except Judgment[9]. It was also considered the ISO 18.104: 2014 - Health Informatics: categorical structures for the representation of nursing diagnoses and nursing actions in terminology systems, in which a nursing diagnosis can consist of a single Focus term along axis at the end of Judgment axis or a clinical finding[11].

The constructed nursing diagnoses/outcomes and interventions were typed in a spreadsheet, in alphabetical order and compared with the concepts contained in the ICNP® 2017[11] through manual cross-mapping, resulting in constant and non-constant sentences. The non-constant statements were submitted to analysis for similarity and comprehensiveness in relation to the pre-combined terms contained in the ICNP® 2017, following the criteria previously described[9]. This process resulted in a list of nursing diagnoses, outcomes and interventions related to people with TB.

4) Assessment of relevance of nursing diagnosis, outcome and intervention statements by nurses who care for people with TB in Primary Health Care.

The nursing diagnoses, outcomes and interventions constructed in the previous step were submitted to assessment of relevance, by consensus, by nurses.

Primary Health Care nurses in a city in the Southeast Region of Brazil, who had experience in caring for people with TB, who had more than five years of graduation, with a minimum degree of specialist, were invited to participate in a small and homogeneous group. Nurses were contacted via invitation letter, which explained the research and indicated a time and place for the meeting, if they agreed to participate.

At the beginning of the meeting, guidance was given regarding research, Wanda Horta's Theory of Basic Human Needs, and ICNP®. The judges read the material and filled out the instrument for assessing the relevance of the subset's nursing diagnoses, outcomes and interventions. Then, only the items where there was disagreement were discussed and, by consensus, decisions were made to remain, remove or rewrite a statement. The meeting was audio recorded for later analysis, lasting one and a half hours.

After the meeting, the proposed changes were written by the researcher and socialized via electronic mail. Participants had seven days to read and consider writing.

5) ICNP® terminology subset structuring guided by Wanda Horta's Theory of Basic Human Needs.

The subset was structured with the list of nursing diagnoses, outcomes and interventions, organized according to Wanda Horta's Theory of Basic Human Needs[10], following the INC recommendations[8].

Data analysis

The nursing diagnoses, outcomes and interventions constructed were considered validated in the presence of consensus by specialist nurses.

RESULTS

Thus, 61 indicators of altered needs relevant to care for people with TB were identified from the 24 articles selected in the review. These indicators went through a normalization process, resulting in 46 validated terms and five excluded because they do not represent caring for people with TB. The 46 validated terms were submitted to manual cross-mapping with ICNP® 2017 Focus Axis terms, and it was found that all were constant (Chart 1).

From the constant and non-constant terms in the ICNP®, 54 nursing diagnosis/outcomes were constructed, submitted to manual cross-mapping with the ICNP® 2017, which resulted in 40 constant diagnoses/outcomes and 14 non-constant diagnoses/outcomes in ICNP® 2017, marked with asterisks in Chart 2.

For each diagnosis constructed, a set of nursing interventions was created, resulting in 467 nursing interventions. Of these, 06 interventions are not listed in the ICNP® 2017, being broken down below: 1) guide the use of a mask in the first 15 days; 2) forward sputum sample to the laboratory; 3) to stimulate expectoration; 4) obtain data on weakness; 5) schedule home visits; 6) refer for social and psychological support.

After this process, diagnoses/outcomes and interventions were submitted to the assessment of relevance, by consensus, with nine nurses. The average age of judges was 40.88 years, with 88.89% being female. As for graduation length, the judges have more than 10 years of graduation, with an average of 16.33 years. The duration of work in Primary Health Care was on average 11 years. Regarding their highest title, six judges are specialists (66.67%), two judges are masters (22.22%) and one judge is a doctor (11.11%). Regarding complementary TB training, 88.89% have updated/complementary training in the TB area. With regard to the number of people with TB already followed up by the judges, it was, on average, 55 people per judge.

Chart 1 - Manual cross-mapping between the indicators of altered needs identified in the review, their frequency in literature (n) and ICNP® 2017 Focus Axis terms, Vitória, Espírito Santo, Brazil, 2019

Validated Terms	ICNP® 2017 Focus Axis Term
1. Distress (n=3)	Distress
2. Acceptance of Diagnosis (n=1)	Acceptance
3. Adherence (n=2)	Adherence
4. Alcohol Abuse (n=3)	Alcohol Abuse
5. Family Support (n=3)	Family Support
6. Work and Friend Support (n=1)	Social Support
7. Absence from Work/Loss of Job/ Unable to Work/Unproductive (n=7)	Employment Status
8. Low Income, Risk of Being Without Income, Poverty (n=8)	Income
9. Tiredness/Fatigue (n=4)	Fatigue
10. Embarrassment/Shame (n=4)	Shame
11. Consumption of Legal and Illicit Drugs (n=5)	Drug Abuse
12. Belief (n=1)	Belief
13. Depression (n=4)	Decreased Mood
14. Psychosocial Discomfort (n=1)	Discomfort
15. Difficulty in Performing Self-Care (n=1)	Self-care
16. Difficulties in Performing Daily Activities (n=1)	Activity Intolerance
17. Social Discrimination (n=17)	Discrimination
18. Pain (n=4)	Pain
19. Medication Side Effect (n=4)	Medication Side Effect
20. Sputum (n=1)	Expectoration
21. Hope of Healing, Feeling of Overcoming (n=4)	Hope
22. Stigma (n=13)	Stigma
23. Stress (n=2)	Stress
24. Shortness of Breath (n=5)	Dyspnea
25. Lack Of Knowledge Of Disease (n=5)	Knowledge Of Health
26. Lack Of Knowledge Of Treatment Regime (n=1)	Knowledge Of Medicinal Regime
27. Lack Of Intimate Relationships with Spouses or Partners (n=1)	Sexual Behavior
28. Fever (n=6)	Fever
29. Weakness (n=3)	Weakness
30. Hemoptysis/Sputum with Blood (n=6)	Blood Expectoration
31. Emotional instability (n=2)	Insecurity
32. Social Isolation (n=15)	Social Isolation
33. Physical Limitations (n=8)	Limitations
34. Fear (n=6)	Fear
35. Denial of Diagnosis (n=1)	Denial
36. Loss of Social Dignity (n=1)	Impaired Dignity
37. Loss of Social Legitimacy (n=1)	Patient Right
38. Lack of Appetite (n=4)	Appetite
39. Loss of Self-Confidence/Loss of Self-Esteem (n=8)	Low Self Esteem
40. Weight Loss/Emaciation (n=12)	Impaired Weight
41. Feeling of Powerlessness (n=4)	Powerlessness
42. Loneliness (n=2)	Loneliness
43. Night Sweats (n= 3)	Perspiration Process
44. Smoking (n=1)	Tobacco Abuse
45. Cough (n=12)	Cough
46. Sadness (n=3)	Sadness

After the consensus assessment, three diagnoses were excluded and two had their wording changed, resulting in 51 diagnoses/outcomes. Of these, 37 diagnoses are constant and 14 are not constant in the ICNP® 2017. The diagnoses/outcomes elaborated in this study were organized according to the structure of psychobiological, psychosocial and psychospiritual needs of Wanda Horta's Theory of Basic Human Needs. Among the psychobiological needs identified in this study, are oxygenation, nutrition, elimination, exercise and physical activity, sexuality, regulation, therapy, body care, physical security and perception. The psychosocial needs identified are gregarious, love, acceptance, learning, self-esteem, safety, and self-fulfillment. As for psycho-spiritual needs, only the religious was identified. As for interventions, there were changes and adjustments, and the repetitions were removed according to each need, ending with 264 interventions, 256 of which were constant and eight not constant in the ICNP® 2017. Thus, the subset's final configuration is described in Chart 2.

Chart 2 - ICNP® terminology subset for people with tuberculosis - Vitória, Espírito Santo, Brazil, 2019

PSYCHOBIOLOGICAL NEEDS
Oxygenation - nursing diagnosis/outcomes
1. Mild/Moderate/Severe Dyspnea 2. Cough
Nursing interventions
1. Referring to Physiotherapy Service 2. Encouraging Breathing Or Coughing Technique 3. Maintaining Airway Clearance 4. Measuring Breathing Movements 5. Assessing Eating Or Drinking Behaviour 6. Assessing Respiratory Status 7. Teaching Family About Monitoring Respiratory Status 8. Teaching About Fluid Intake 9. Teaching Breathing Technique 10. Teaching Mask Use in the First 15 Days of Treatment
Nutrition - nursing diagnosis/outcomes
1. Lack Of Appetite 2. *Impaired Weight
Nursing interventions
1. Monitoring Food Intake 2. Monitoring Weight 3. Assessing Appetite 4. Assessing Food Intake 5. Assessing Food Supply 6. Teaching Family About Disease 7. Teaching About Food Intake 8. Teaching About Effective Weight 9. Weighing Patient
Elimination - nursing diagnosis/outcomes
1. *Expectoration
Nursing interventions
1. Evaluating Presence Of Blood 2. Collecting Sputum Samples 3. Forwarding Sputum Sample to Laboratory 4. Referring to Physiotherapist Service 5. Stimulating Expectoration 6. Managing Specimen 7. Managing Specimen Control 8. Assessing Sputum 9. Teaching About Fluid Intake

To be continued

Chart 2

Exercise and physical activity - nursing diagnosis/outcomes

1. Fatigue
2. Weakness
3. Activity Intolerance
4. *Disability

Nursing interventions

1. Encouraging Rest
2. Facilitating Ability To Communicate Needs
3. Managing Fatigue
4. Monitoring Medication Side Effect
5. Assessing Fatigue
6. Assessing Weakness
7. Assessing Food Supply
8. Assessing Activity Tolerance
9. Teaching How To Increase Activity Tolerance
10. Teaching About Disease
11. Teaching About Food Intake
12. Reinforcing Capabilities

Sexuality - nursing diagnosis/outcomes

1. *Impaired Sexual Behaviour

Nursing interventions

1. Facilitating Ability to Communicate Needs and Feelings
2. Assessing Sexual Behaviour
3. Teaching About Sexual Behaviour
4. Teaching About Disease
5. Diagnostic Test (for HIV)
6. Contraceptive Use

Regulation - nursing diagnosis/outcomes

1. Fever
2. Decreased Mood
3. *Impaired Night Perspiration Process

Nursing interventions

1. Facilitating Access To Treatment
2. Facilitating Family Ability To Participate In Care Plan
3. Facilitating Ability To Communicate Needs And Feelings
4. Decreased Mood Screening
5. Managing Negative Behaviour
6. Managing Fever
7. Managing Decreased Mood
8. Measuring Body Temperature
9. Monitoring Body Temperature
10. Assessing Emotional Support
11. Assessing Decreased Mood
12. Teaching Family About Disease
13. Teaching How To Control Fever
14. Teaching About Disease
15. Teaching How To Measure Body Temperature
16. Teaching How To Use Medication
17. Prescribing Medication
18. Promoting Social Support
19. Promoting Emotional Support

Treatment - nursing diagnosis/outcomes

1. Impaired Adherence to Medication Regime
2. Impaired Adherence to Regime
3. Medication Side Effect
4. Non Adherence to Medication Regime
5. Non Adherence to Regime
6. Risk For Medication Side Effect

Nursing interventions

1. Administering Medication
2. Scheduling Follow Up Appointment
3. Evaluating Adherence To Regime
4. Evaluating Response To Medication
5. Collaborating With Family On Medication Procurement
6. Consulting Health Care Provider About Medication Side Effects
7. Demonstrating Medication Administration

8. Contracting For Adherence
9. Follow Up Appointment
10. Home Visit
11. Facilitating Access To Treatment
12. Facilitating Family Ability To Participate in Care Plan
13. Facilitating Ability To Communicate Needs and Feelings
14. Managing Medication Side Effect
15. Monitoring Adherence To Medication
16. Monitoring Medication Side Effect
17. Assessing Adherence
18. Assessing Adherence To Medication Regime
19. Assessing Adherence to Regime
20. Assessing Barriers to Adherence
21. Assessing Medication Side Effect
22. Teaching About Disease
23. Teaching About Medication Side Effects
24. Teaching About Medication
25. Teaching About Treatment Regime
26. Prioritising Treatment Regime
27. Promoting Adherence to Medication
28. Promoting Adherence to Regime
29. Reinforcing Adherence
30. Reporting Status To Interprofessional Team

Body care - nursing diagnosis/outcomes

1. Self Care Deficit

Nursing interventions

1. Encouraging Self Care
2. Facilitating Family Ability To Participate in Care Plan
3. Assessing Self Care
4. Assessing Ability To Perform Caretaking
5. Assessing Hygiene Pattern
6. Teaching Family About Hygiene Pattern
7. Teaching About Self Care
8. Teaching About Hygiene
9. Promoting Self Care

Physical safety - nursing diagnosis/outcomes

1. Alcohol Abuse
2. Drug Abuse
3. Tobacco or Smoking Abuse

Nursing interventions

1. Counselling About Drug Abuse
2. Counselling About Smoking
3. Counselling About Alcohol Use
4. Administering Medication
5. Evaluating Smoking (Fagestrom Test)
6. Referring To Self Help Service
7. Referring To Health Service (*Centro de Atenção Psicossocial Álcool e Drogas* - CAPS AD)
8. Referring To Support Group Therapy
9. Home Visit
10. Facilitating Access To Treatment
11. Facilitating Family Ability To Participate in Care Plan
12. Facilitating Ability To Communicate Needs And Feelings
13. Facilitating Alcohol Abuse Recovery
14. Facilitating Drug Abuse Recovery
15. Alcohol Abuse Screening
16. Drug Abuse Screening
17. Smoking Screening
18. Managing Withdrawal Symptom
19. Monitoring Withdrawal
20. Assessing Withdrawal
21. Assessing Alcohol Abuse
22. Assessing Drug Abuse
23. Assessing Readiness For Smoking Cessation
24. Assessing Smoking
25. Teaching About Smoking Cessation
26. Teaching About Alcohol Abuse
27. Teaching About Drug Abuse
28. Teaching About Withdrawal Symptom Control
29. Teaching About Self Help Service

To be continued

To be continued

Chart 2

30. Teaching About Smoking
31. Reporting Status To Interprofessional Team
32. Smoking Cessation Therapy

Perception - nursing diagnosis/outcomes

1. *Chest Pain

Nursing interventions

1. Knowledge Of Patient Controlled Analgesia
2. Evaluating Response to Pain Control
3. Managing Pain
4. Assessing Pain
5. Teaching About Disease
6. Teaching About Pain
7. Teaching About Managing Pain
8. Prescribing Medication

PSYCHOSOCIAL NEEDS

Gregarious - nursing diagnosis/outcomes

1. *Discrimination
2. Stigma
3. Social Isolation
4. Risk For Social Isolation
5. Risk For Loneliness
6. *Loneliness

Nursing interventions

1. Counselling About Fears
2. Supporting Psychological Status
3. Supporting Family
4. Supporting Family Coping Process
5. Referring To Community Service
6. Referring To Support Group Therapy
7. Encouraging Positive Affirmations
8. Facilitating Access To Treatment
9. Facilitating Family Ability To Participate in Care Plans
10. Facilitating Ability To Communicate Needs and Feelings
11. Identifying Altered Perceptions
12. Assessing Readiness For Disclosure Of Health Status
13. Assessing Health And Social Care Needs
14. Teaching Community About Disease
15. Teaching About Diversional Therapy
16. Promoting Family Support
17. Promoting Social Support
18. Promoting Diversional Therapy

Love - nursing diagnosis/outcomes

1. Lack Of Family Support
2. Lack Of Social Support

Nursing interventions

1. Supporting Family
2. Collaborating With Family
3. Coordinating Family Conference
4. Demonstrating Medication Administration
5. Referring To Community Service
6. Referring To Family Therapy
7. Home Visit
8. Facilitating Family Ability To Participate in Care Plan
9. Facilitating Ability To Communicate Needs and Feelings
10. Monitoring For Impaired Family Coping
11. Assessing Social Support
12. Assessing Family Knowledge Of Disease
13. Assessing Health And Social Care Need
14. Assessing Family Process
15. Teaching Family About Disease
16. Teaching About Family Process
17. Teaching About Diversional Therapy
18. Promoting Family Support
19. Promoting Social Support
20. Promoting Effective Family Communication
21. Promoting Diversional Therapy
22. Promoting Social Support

Chart 2

Acceptance - nursing diagnosis/outcomes

1. Acceptance Of Health Status
2. Denial

Nursing interventions

1. Administering Medication
2. Referring To Support Group Therapy
3. Establishing Trust
4. Home Visit
5. Facilitating Ability To Communicate Needs and Feelings
6. Assessing Acceptance Of Health Status
7. Assessing Attitude Toward Health Status
8. Assessing Readiness For Disclosure Of Health Status
9. Assessing Denial
10. Teaching Family About Health Seeking Behaviour
11. Teaching About Health Seeking Behaviour
12. Teaching About Disease
13. Promoting Acceptance Of Health Status
14. Promoting Family Support
15. Promoting Health Seeking Behaviour
16. Reporting Status To Interprofessional Team

Learning - nursing diagnosis/outcomes

1. Lack Of Knowledge Of Disease (Tuberculosis)
2. Lack Of Knowledge Of Medication Regime
3. Lack Of Knowledge Of Treatment Regime

Nursing interventions

1. Demonstrating Medication Administration
2. Home Visit
3. Assessing Knowledge Of Medication Regime
4. Assessing Knowledge Of Treatment Regime
5. Assessing Attitude Toward Medication Management
6. Assessing Knowledge Of Disease
7. Assessing Family Knowledge Of Disease
8. Teaching Community About Disease
9. Teaching Family About Disease
10. Teaching Family About Treatment Regime
11. Teaching About Disease
12. Teaching About Medication
13. Teaching About Treatment Regime

Self-esteem and safety - nursing diagnosis/outcomes

1. *Distress
2. Low Self Esteem
3. *Impaired Patient Right
4. *Compromised Dignity
5. Hope
6. *Stress
7. *Insecurity
8. Fear
9. Employment Problem
10. Inadequate Income
11. Sadness
12. Shame

Nursing interventions

1. Acceptance Of Health Status
2. Counselling about Hopes
3. Counselling About Fears
4. Demonstrating Relaxation Technique
5. Referring To Social Worker
6. Referring To Health Service (Psychologist)
7. Referring To Social Worker Service
8. Referring To Group Therapy
9. Referring To Support Group Therapy
10. Encouraging Positive Affirmations
11. Establishing Trust
12. Explaining Patient Right (Market Basket and Transport Voucher)
13. Facilitating Ability To Communicate Needs and Feelings
14. Decreased Mood Screening
15. Managing Impaired Coping Process
16. Identifying Barrier To Communication

Chart 2 (concluded)

17. Identifying Altered Perceptions
18. Maintaining Dignity And Privacy
19. Observing Altered Perception
20. Assessing Attitude Toward Disease
21. Assessing Attitude Toward Treatment Regime
22. Assessing Self Esteem
23. Assessing Ability To Manage Stress
24. Assessing Fear
25. Assessing Stress Level
26. Assessing Sadness
27. Teaching About Health Seeking Behaviour
28. Teaching About Stress Control
29. Teaching About Diversional Therapy
30. Teaching Relaxation Technique
31. Promoting Emotional Support
32. Promoting Self Esteem
33. Promoting Health Seeking Behaviour
34. Promoting Positive Psychological Status
35. Promoting Hope
36. Promoting Positive Relationships
37. Promoting Diversional Therapy
38. Protecting Patient Right
39. Promoting Emotional Support
40. Diversional Therapy
41. Use Relaxation Technique
Self-fulfillment - nursing diagnosis/outcomes
1. Powerlessness
Nursing interventions
1. Referring To Support Group Thaerapy
2. Encouraging Positive Affirmations
3. Facilitating Ability To Communicate Needs and Feelings
4. Assessing Attitude Toward Health Status
5. Teaching About Health Seeking Behaviour
6. Promoting Family Support
7. Promoting Health Seeking Behaviour
PSYCHOSPIRITUAL NEEDS
Religious - nursing diagnosis/outcomes
1. *Impaired Belief
Nursing interventions
1. Supporting Beliefs
2. Assessing Beliefs
3. Facilitating Ability To Communicate Needs and Feelings

DISCUSSION

In 2014, the World Health Organization launched End TB strategy. To this end, it established as one of strategy's pillars an integrated care centered on people with TB, in order to reduce their suffering. In this perspective, nursing assumes a fundamental role in TB control. Through nursing care, it is possible to build a care plan based on basic human need indicators identified in this individual, collaborating with the disease favorable outcome[2]. Individuals with TB have biological, social and spiritual needs manifested by empirical indicators, which were identified through a literature review and anchored in Wanda Horta's Theory of Basic Human Needs[10]. Among the psychobiological needs, the diagnoses Expectoration, Fever and Impaired Weight were the most expressive. These symptoms are the first to manifest in people with TB, causing changes in their body and quality of life[4-5].

For timely treatment, diagnoses related to Adherence to Regime are essential, covering behavioral, psychological and social aspects, as well as health staff's skills and social support network. During the therapeutic process, information and adjustments of therapy regimes to people' routine, as well as family, social and emotional support, are fundamental in the singular care of each person[12].

Individuals with TB have insufficient knowledge about the disease and its treatment, due to the low level of education, which can lead to therapy regime non-adherence and abandonment. In this context, nurses, when identifying the diagnoses Lack Of Knowledge Of Disease, Of Treatment Regime and Of Medication should, throughout the process, seek to create a bond, co-responsibility and provide adequate information. Individuals who receive guidance about the disease, about the importance of treatment and possible side effects, as well as the consequences of irregular treatment regime, are more likely to adhere to treatment[4,13].

On the other hand, there is a poor prognosis in individuals who have the diagnoses Alcohol and Drug Abuse, since alcohol consumption leads to changes in the action of medications, compromises the immune system and causes treatment to be abandoned. Moreover, using drugs causes biological changes, hinders Adherence to Regime and leads to social segregation, triggering barriers to family support[14].

Among the psychosocial needs, the diagnoses/outcomes Social Isolation, Discrimination, and Stigma stood out, which, historically, are linked to people with TB, affecting their social life and acceptance of disease[4,15]. People with TB feel stigmatized by society, family and friends, leading to their withdrawal from social life and causing them to feel depressed[16]. Prejudice and stigma affect individuals' perception of themselves, triggering a behavior of keeping disease secret, due to the prescription of judgment, humiliation, and isolation[15].

Concerning psycho-spiritual needs for people with TB, only the diagnosis Belief was identified. Belief is related to the process of coping with people in relation to disease, their knowledge and experiences, involving issues of understanding disease as divine punishment associated with negative feelings, such as depression, fear and insecurity, resulting in impaired treatment adherence. However, if belief is linked to will, hope and courage, it will contribute to the positive outcome of treatment[16].

Study limitations

Although the relevance of this subset is evident, some points must be considered: the stage of assessing the relevance of nursing diagnosis, outcome and intervention statements for people with TB occurred in a small group and with a specific population, an event that may limit the applicability of this study to other settings. With this, submitting this study to an external assessment, which considers several settings, can improve its awareness and specificity.

Contributions to nursing

The ICNP® terminology subset for people with TB is an instrument that can support nurses' clinical decision-making in assisting this person, respecting their needs and favoring the documentation and inclusion of this terminology in nursing practice[7,17].

FINAL CONSIDERATIONS

The ICNP® terminology subset for people with TB, structured according to Wanda Horta's Theory of Basic Human Needs, has 51

diagnoses and 264 nursing interventions, 24 diagnoses distributed in psychobiological needs, 26 diagnoses in psychosocial and one diagnosis in psychospiritual. Concerning psycho-spiritual need, there is a need, revealing that there is a lack of research that addresses the psycho-spiritual needs of people with TB.

The subset is an effective technological tool for identifying relevant needs of people with TB, being able to contribute to nurses during consultation in Primary Health Care, assisting in developing actions to promote, prevent and recover people' health individually.

The ICNP® terminology subset for people with TB is an educational and care technology that collaborates with the teaching and learning process, as it relates the elements of a nursing theory with a terminology of diagnoses, outcomes and interventions, contributing to the knowledge of classifications and supporting its use in teaching and health institutions.

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