IDentification of patients in need of general and specialised PALLiative care (ID-PALL©): item generation and content validity of a new interprofessional screening instrument.

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Abstract

Background Early identification of patients requiring palliative care is a major public health concern. A growing number of instruments exist to help professionals in identifying these patients, but thus far, none have been thoroughly assessed for criterion validity. In addition, no currently available instruments differentiate between patients in need of general vs. specialized palliative care, and most are primarily intended for physicians’ use. This study aims to develop a new interprofessional instrument allowing identification of patients in need of general vs specialized palliative care.

Methods The instrument development consisted of four steps: i) literature review to determine the concept to measure; ii) generation of a set of items; iii) review of the initial set of items by experts to establish the content validity; iv) administration of the items to a sample of the target population to establish face validity. We conducted a Delphi process with experts in palliative care to accomplish step 3 and sent a questionnaire to nurses and physicians non-specialised in palliative care to achieve step 4. A committee of interdisciplinary clinical experts supervised all steps.

Results The study was conducted in the French - and Italian-speaking regions of Switzerland. The literature review confirmed the necessity of distinguishing between general and specialised palliative care needs and of adapting clinical recommendations to these different needs. Thirty-six nurses and physicians participated in the Delphi process and 28 were involved in the face validity assessment. The Delphi process resulted in two item lists: a 7-items list to identify patients in need of general PC and an 8-items list for specialised PC needs. The
content and face validity were deemed to be acceptable by both the expert and the target populations.

Conclusion This instrument considers a new perspective in the identification of patients requiring palliative care as it has been designed to differentiate between general and specialised palliative care needs. Moreover, diagnostic data is not fundamental to the use of the instrument, thus facilitating its use by healthcare professionals other than physicians, in particular nurses. Internal and criterion validity assessments are ongoing and essential before further dissemination of the instrument.

background

The World Health Organisation (WHO) has defined palliative care (PC) as “an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual” (1). Although this definition allows clarification of the concept of palliative care, it does not help in defining a patient in need of PC and in making the distinction between general and specialised PC. This distinction is, nevertheless, crucial to provide appropriate care to these patients (2, 3). Identification of patients in need of PC has been a major international public health concern for the last ten years. There is a consensus amongst experts in the field that PC should be initiated as early as possible in a patient’s disease trajectory, in order to provide best patient/relatives centred care (4).

Prevalence of patients in need of PC varies from 9% to 73% in various acute care
settings, with the highest prevalence occurring in clinical settings, such as internal medicine or oncology (5-11). Identification of these patients remains sub-optimal and occurs too late in the illness trajectory and more particularly with non-oncological diseases, which have more unpredictable trajectories (12-14). Numerous consequences arise from inadequate identification. These include, but are not limited to (i) excess hospital mortality - 80% - when the majority of people wish to die at home (15, 16); (ii) suboptimal symptom management (17-19); (iii) unplanned hospitalisations with long hospital stays (20, 21); (iv) prescription of inappropriate treatments due to a lack of advance care planning (22, 23); and, (v) insufficient support for the patient and their relatives (20, 24, 25). On the other hand, when patients receive PC, their health is enhanced with improved pain relief, less dyspnoea and depression, and enhanced quality of life, patient satisfaction and chances of dying at home (26-31); psychological distress, decisional conflict, acute interventions or hospital readmissions are reduced (32-35), and quality of life for families is improved (36).

Several instruments have been developed in order to facilitate early identification of patients in need of PC with different issues to be highlighted: (i) none of the existing instruments differentiate between patients in need of general versus specialised PC; (ii) available identification instruments include medical diagnostic criteria and have been primarily designed for use by physicians, excluding other key healthcare professionals (37); (iii) most of the existing instruments have have undergone limited psychometric testing.

The aim of this paper is to describe the development of a new PC screening instrument to identify patients in need of general and specialised palliative care independently of their disease. The intended application of the instrument is to
assist all healthcare professionals in evaluating patients’ need for palliative care. The target users of the instrument include in particular nurses as they generally have the closest contact with patients. Professionals may work in any acute care settings, except in intensive care units and emergency departments, and do not need to have specific palliative care training.

methods

Study design

This is a methodological study of instrument development, based on DeVellis et al. (38) and Streiner et al.’s (39) recommendations for scale development. The instrument was developed with the following four steps: (1) determine the concept to measure; (2) generate a set of items; (3) review the item set by experts (content validity); (4) administer items to a sample of the target population (face validity).

Step 1: determine the concept to measure.

Determination of the concept of interest to be measured was driven by clinical unmet needs and identified research gap in the identification of patients in need of general versus specialised PC. The Pubmed, CINHAL, Embase, Cochrane and JBI databases were consulted between January and March 2016. Published studies and national/international recommendations were used to answer the research question: what are the currently available definitions for general PC and for specialized PC?

Step 2: generate a set of items

The aim of this second step was to obtain a list of items relevant to the construct and the target population of interest, as well as for the context in which the instrument is intended to be used. As the target population has some difficulties to identify patients requiring PC because professionals do not know the PC criteria, it
was not deemed appropriate to include them at this stage of development. For an instrument to meet the needs of busy healthcare professionals, it needs to be as short and practical as possible. Regardless of whether the items referred to generalised or specialised PC, the first author selected the relevant items from the literature, including published identification instruments (40-44). This process was completed by a committee of interdisciplinary clinical experts (CICE) composed of one clinical nurse specialist (FTL), one psychologist (MB) and two physicians (MB, GDB), who were in charge of ensuring the relevance, comprehensiveness and comprehensibility for the clinical practice, by reformulating, adding or clustering items (39). Following literature findings that people with life limiting non-cancer conditions have less access to palliative care (12, 19), the items were designed for patients with either oncological or non-oncological pathologies. Finally, the CICE determined which item belonged to which group (generalised PC or specialised PC).

**Step 3: review of initial set of items by experts**

A modified Delphi technique, using a qualitative and quantitative part, was used to assess the relevance and the comprehensiveness of items related to general versus specialised PC from the final list generated in Step 2. This method permitted physicians and nurses from two linguistic regions of Switzerland (French and Italian), all experts in PC, to participate in the study (45-49). This expert panel of clinicians was formed according to the following criteria: (i) a minimum of three years experience in PC, (ii) working in a hospice or in a hospital/community PC team, (iii) working in the French or Italian speaking regions of Switzerland, and (iv) having a sufficient oral and written level of French as this part of the research was conducted in French. In addition, nurses were required to have undertaken specialised PC training or be a clinical nurse specialist or a head nurse. Physicians
were required to be at least senior residents. Reasons for non-participation were not asked. Three rounds were necessary to achieve consensus (Figure 1).

Figure 1: Delphi process flowchart

In round 1, the expert panel had to rank five items in order of priority for each set (general and specialised PC), with scores ranging from 5 (the most important) to 1 (the least important). The CICE recommended keeping items with a mean of ≥ 3.5 and those selected by more than half of the participants. The choice of items was also influenced by the overall consistency of the items selection and by the qualitative analysis of the comments. If an item pertaining to a specific issue was chosen in the first round, other items related to this issue were excluded from the second round. The same was true for items that had not been chosen at all in the first round. A questionnaire including both quantitative and qualitative questions was sent to participants (all questionnaires used in this study can be requested from the first author). We carried out a pre-test with two nurses and one physician specialised in PC to assess the time necessary to complete questionnaires and the clarity of instructions.

In round 2, the same expert panel was asked to choose additional items for the two sets with the same procedure as in the round 1. As none of the items were chosen by more than half of the participants and reached a mean of ≥ 3.5, only one of the two CICE conditions had to be met.

In round 3, the aim was to confirm the item classification into general and specialised PC and to ensure that the formulation was comprehensible. A larger sample of experts, which also included those who participated in Round 1 and 2, were asked four yes/no questions to confirm (i) the relevance of the item selection
in order to identify general and specialised PC patients, (ii) the comprehensibility and the clarity of the items and finally (iii) the name of the instrument. Two final sets of items (generalised PC and specialised PC) were developed at the end of this round 3.

**Step 4: administer items to a sample of the target population**

The aim of this last step was ensure the face validity, which is a part of content validity, of the final set of items with the target population of end-users, namely nurses and physicians, without specialised PC training and working in acute care setting at a Swiss university hospital. Inclusion criteria were: i) being a clinical nurse specialist or a senior resident; ii) working in internal medicine, surgery, oncology, cardiology, pulmonology or ambulatory setting; iii) working full time (or equivalent) for at least three years in one of these units. We sent participants a questionnaire including seven yes/no questions, pertaining to relevance, comprehensibility and feasibility. Space for qualitative data for clarification or suggestions for “no” answers and other general comments were included in the questionnaire.

Descriptive analyses were conducted using IBM SPSS statistics 25. The CICE, who has a specific training in qualitative research, conducted a thematic analysis of the qualitative data (50). Data were coded by the first author and then presented to the CICE for agreement.

**results**

**Step 1: determine the concept to measure**

The origin of the construct of palliative care was grounded in the WHO definition (see above). The identification of patients requiring PC is the ability to recognise
them at the right time of their illness trajectory – depending on the patients and relatives’ needs – in order to introduce at the right time a general approach of PC and to be aware of the appropriate time to refer to a specialised PC team (2, 3, 12, 51). General PC concerns all patients who have a life-threatening disease or who are at the end of life without complex bio-psycho-socio-spiritual issues. These patients may be cared for by healthcare professionals with basic knowledge of PC (51, 52). General PC includes breaking bad news, relief of pain and other symptoms, establishing goals of care, and supporting patients and relatives throughout the continuum of care (43, 53, 54). General PC concerns nearly 80% of the proportion of patients requiring PC (2). Specialised PC is for patients whose clinical situations are complex and/or unstable, and associated with high level of suffering of the patients and/or their relatives (51, 52, 55). Specialised PC and treatments should be provided by an interprofessional team, including physicians, nurses, psychologists, social workers, and spiritual assistants, who are specifically trained in PC (43, 54).

**Step 2: generate of a set of items**

The first author (FTL) selected 41 items from the literature (Table 1), including 21 items from the three most commonly used instruments: the Gold Standard Framework (GSF) (40), the Supportive and Palliative Care Indicator Tool (SPICT) (41), and the Necesidades Paliativas (NECPAL) (56) and 17 from other instruments or expert recommendations. Three different *surprise questions* with various expected times of death: 12 months, 6 months or “during the next months, weeks and days” were also integrated (57, 58). Items representative of physical decline (e.g. decreased ability to perform self-care or less mobility) were retained. To make the instrument useable for key healthcare professionals other than physicians, items related to medical indicators of specific pathologies (e.g. cancer stages or
spirometric criteria) were not included. Out of these 44 items, 32 were considered most relevant and understandable by the CICE. The CICE completed this first set of 32 items with 11 items derived from their clinical expertise. Short and clear items were written with dichotomous “yes” or “no” response categories because it is impossible for professionals to give a reliable estimation of the degree of difficulties encountered by the patients (39).

Table 1: Item generation process

| Development steps | Item selection | Results |
|-------------------|----------------|---------|
| **Step 2**        | Initial set 1 of items (first author) | 41 items: |
|                   | Initial set 2 of items (CICE) | 21 from GSF, SPICT and NECPAL© |
|                   | Categorisation of second set of items (CICE) | 17 from others instruments and expert recommendations |
|                   | 3 different surprise questions | 3 different surprise questions |
| **Step 3**        | Delphi round 1 (expert panel) | 43 items: |
|                   | Delphi round 2 (expert panel) | 32 items selected from the initial set |
|                   | Delphi round 3 (expert panel) | 11 new items added from the CICE clinical expertise |
|                   | 25 items for general PC | Two part instrument |
|                   | 18 items for specialised PC | 18 items for specialised PC |
|                   | 5 items: | 5 items: |
|                   | 3 items for general PC | 3 items for general PC |
|                   | 2 items for specialised PC | 2 items for specialised PC |
|                   | 13 items: | 13 items: |
|                   | 7 items for general PC | 7 items for general PC |
|                   | 6 items for specialised PC | 6 items for specialised PC |
|                   | Two lists of items | Two lists of items |
|                   | 7 items for general PC | 7 items for general PC |
|                   | 8 items for specialised PC | 8 items for specialised PC |

**Step 3: review of initial set of items by experts**

At least one physician and/or nurse of each of the specialised palliative care units and hospital or community PC team from each of the two linguistic regions were identified. A total of 71 professionals were screened for inclusion in the study; 66 met all inclusion criteria and 42 consented to participate (see table 2 for professional and demographic characteristics). In the first round 19 nurses and 17 physicians participated; in the second 18 and 13; and in the third 15 and 14, respectively. Most of the participants had a specific training in PC (78%) and the mean of their clinical practice in PC was 13 years.

Round 1

For the general PC part, out of the 25 items, three items reached a mean of more
than 3.5: (i) the 12-month surprise question (M = 4.2 (SD = 1.4); n = 28), (ii) having life-limiting disease (M = 4.0 (SD = 1.3); n = 29) and (iii) the patient or family member is seeking palliative care (M = 3.5 (SD = 1.3); n = 25). For the specialised PC part, out of the 18 items, two items were selected: (i) persistence of uncontrolled symptoms (M = 4.4 (SD = 0.6); n = 27) and (ii) difficulty in assessing symptoms (M = 3.8 (SD = 0.9); n = 18) (Table 2).

In addition, three items were suggested by the expert panel and were added for round 2. Items with a mean ≤ 2 and chosen by less than five experts were not included in round 2.

Round 2

Considering the general PC part, seven items scored with a mean ≥ 3.7. In order to minimise the number of items, the items related to the notion of vulnerability/frailty were grouped to obtain four items. Regarding the specialised PC part, two items obtained means ≥ 3.5 and were chosen by more than half of the participants. Four others obtained either means ≥ 3.5 or were selected by more than half of the participants. These six items were kept for the specialised PC part (Table 2).

Round 3

69% of participants (n=20) thought that the general PC items would help healthcare professionals non-specialised in PC to identify patients in need of general PC, and 76% (n=22) estimated that the specialised PC items would facilitate the identification of patients in need of specialised PC. Half of the participants suggested modifying some items for better understanding (e.g: to replace caregiver by professional; to give examples of what are the life-sustaining measures; to replace ‘life-threatening disease’ by ‘disease that limits life expectancy’). These suggestions were taken into account in the final set of items. Finally, the proposed
name ID-PALL© for IDentification of the patient in need of PALLiative care was approved by 76% (n=22) of the participants; no other name was suggested.

Table 2: Item selection

Insert table 2 here

Step 4: administer items to a sample of the target population

Twenty nurses and 8 physicians out of a total of 24 invited nurses and 24 invited physicians participated in the face validation (57%). Twenty-three participants (82%) considered that the items would help them to identify patients in need of general PC and 24 (86%) those in need of specialised PC. Twenty-seven professionals (96%) thought that such classification of items into general and specialised PC is needed to appropriately care for these patients. Twenty-two found the length and the presentation of the instrument appropriate and understood how to use it and how to interpret the results. On the other hand, 15 (54%) asked for the clarity of some items to be improved. The main requests were to have shorter and fewer items; to clarify those of the general part that were considered not specific enough; to arrange some items differently; to modify some terminology considered too vague (e.g. ‘uncomfortable symptoms’) and to highlight keywords in each item. Following these suggestions, modifications were performed to the wording of the items. At the end, we obtained two lists of items: one including seven items to identify patients in need of general PC and the other including eight items to identify specialised PC needs.

Discussion

To the best of our knowledge, this study is the first one that aims to develop and validate a screening instrument to identify patients in need of general or specialised
PC independently of the disease. From the literature, this distinction is crucial in order to identify the most suitable moment for implementing adequate PC (3, 12, 51). A rigorous process for instrument development was followed to obtain items that could identify patients in need of generalised or specialised PC. Both the content and face validity process of the instrument were deemed to be acceptable within both the expert and the target populations. The name ID-PALL© was chosen for the instrument that will be created based on these two lists of items. Concerning the content validity, most of the qualitative comments were relevant, but sometimes it was unclear as to how these could be used to modify the items because data saturation cannot be reached with this method (59). In the same way, each expert thought about their choices and comments in terms of what they saw as logical, which may introduce inconsistencies across the panel of experts. Finally, some items obtained a very high mean but were chosen by few of the experts while other items obtained a lower mean but were chosen by more experts. The CICE’s work was therefore crucial, requiring intensive discussions and adjustments in order to reach a consensus on two lists of relevant items that cover the bio-psycho-social and spiritual dimensions of PC and which also include the most important challenges facing health professionals. The interprofessionality of the group was a central element for these discussions.

To maximise the utilisation of an innovation as a new instrument, several factors are important: (i) perceived benefits, (ii) compatibility with users’ values, (iii) ease of use, (iv) experiment before implementation and (v) quick visibility of benefits (60). Considering also that time constraints are a significant barrier to the adoption of innovative practice (60), ID-PALL© was conceived to be brief and containing as
few questions as necessary while still representing the key domains of PC and retaining content validity. This led the CICE to reduce the number of items early in the process, despite the fact that this is not generally recommended by experts (39). Nevertheless, the results of the face validity phase showed that the instrument’s brevity was much appreciated. As this screening instrument was designed to support healthcare professionals in their clinical thinking, brief evidence based recommendations will be added for initial guidance whenever general or specialised PC needs are identified by the instrument. (61-63).

The referral rates for specialised PC remain low among health providers in all care settings, because of the difficulties in identifying these patients early enough (12-14, 31, 36). This also means that it is difficult to know whether patients in need of general PC receive care that is adapted to their particular situation (12, 14, 51). Therefore, we carefully structured the two lists of items in such a way that it would be evident to professionals that patients with life limiting diseases should be evaluated at an early stage for potentially unmet PC needs, even if they don’t meet the requirements for specialised PC. The main strength of the instrument is its two-part form, for general and specialised PC and that is can be completed quickly. Additionally, due to its design and the absence of diagnosis data, this instrument has the potential to be used by healthcare professionals other than physicians, in particular by nurses as they are generally more present and have a better overall knowledge of the patients.

Strengths and limitations

Methodological strengths of this study include the diversity of the expert panel working in multiple PC settings, in different parts of Switzerland, with different
practice patterns, and also with varied PC backgrounds that reflect the diversity of the field. Another strength is the inclusion of the target population in the face validity process, thus reducing possible dissatisfaction of future users (39). A potential limitation of this study relates to imposing a limit on the number of items. However, experts and clinicians had the opportunity to add items, if they deemed it relevant, at all stages of the design. The Delphi process, based on the ranking of the five most important items, did not allow for the establishment of a Content Validity Index (CVI), which is recommended in the literature. We chose a local expert panel for maximum transferability in the subsequent validation study, but we acknowledge that this limits generalisation to other French-speaking regions. Finally, the face validity was performed only with hospital healthcare professionals. Validation in different care settings should be conducted in the future.

conclusions

These results represent the first step of the validation process of the newly developed ID-PALL© instrument. The methods used in the development have resulted in an instrument that is brief and tailored to the needs of all health professionals, nurses in particular, who are confronted with patients with a potential need for PC. This instrument should allow the distinction between patients requiring general vs. specialised PC, regardless of their pathology. We are currently in the process of implementing a criterion validity phase in order to assess the sensitivity and the specificity of this instrument compared with the evaluation of a specialised interprofessional PC team including both nurses and physicians.

abbreviations
ID-PALL©: IDentification of patients in need of general and specialised PALLiative care; WHO: World Health Organization; PC: palliative care; GSF: Gold Standard Framework; SPICT: Supportive and Palliative Care Indicator Tool; NECPAL: Necesidades Paliativas; CICE: committee of interdisciplinary clinical experts; CVI: Content Validity Index; M: mean; SD: standard deviation.

declarations

Ethics approval and consent to participate

In accordance with the Swiss Ethics laws, this study did not require consideration of the human research ethics commission as it did not involve patients or their medical records (Human research act, art. 2) but was conducted in accordance with the general ethical principles for conducting research as stipulated in the Human Research Ordinance rules. Written consent of the participants were obtained.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and analysed during the current study are available from the corresponding author on request.

Competing interests

The authors declare having no competing interests.

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**Authors’ contributions**

FTL, MaB, CG and GDB designed the study. FTL conducted the study. FTL and ASR conducted the appraisal of the identified instruments. FTL conducted the item generation, the Delphi process and the face validity. FTL analysed the data with the support of MaB. FTL, MaB, MiB and GDB were part of the committee of interdisciplinary clinical experts; they supervised the item generation and the development of the instrument. FTL and ASR drafted the manuscript. MaB, MiB, CG and GDB reviewed the manuscript. All authors accepted the final manuscript.

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Table 2

Table 2: Item selection
### Items

| Round | M±SD ; N=36 |
|-------|-------------|

**General PC**

- **Surprise question 12 months**: 4.1 ± 1.4 ; n=20
- **Surprise question 6 months**: 5.0 ± 0.0 ; n=3
- **Surprise question months, weeks or days**: 4.2 ± 0.8 ; n=5
- **PC required by healthcare professional**: 3.2 ± 1.8 ; n=6
- **PC required implicitly or explicitly by patients or relatives**: 3.5 ± 1.3 ; n=19
- **PC required by patients/relatives**: 3.3 ± 1.4 ; n=6
- **Advanced illness, unstable symptoms**: 3.8 ± 1.6 ; n=5
- **Advanced illness and/or diminishing response to aetiological treatments**: 4.3 ± 0.5 ; n=8
- **Disease that cannot be treated, vital prognosis is underway**: 4.0 ± 1.3 ; n=16
- **Decreased response to treatment**: 1.7 ± 0.6 ; n=3
- **At least one disturbing symptom**: 2.6 ± 0.9 ; n=11
- **Decrease in general condition**: 3.2 ± 1.3 ; n=6
- **Poor or deteriorating performance status**: 2.6 ± 0.8 ; n=7
- **General functional decline**: 1.9 ± 0.8 ; n=8
- **Functional markers of decline**: 2.5 ± 0.6 ; n=4
- **Dependency on others for most care needs**: n=0
- **Nutritional markers of decline**: 1.8 ± 0.7 ; n=8
- **Significant weight loss**: 2.0 ± 0.8 ; n=4
- ** Interruption of any vital support measures**: 2.7 ± 0.8 ; n=6
- **Other markers of severity and extreme fragility**: 2.0 ± 1.0 ; n=12
- **Sentinel events**: n=0
- **≥ 2 unscheduled hospitalizations**: 1.8 ± 1.0 ; n=9
- **≥ 2 concomitant diseases**: n=0
- **Significant co-morbidity**: 2.0 ± 1.1 ; n=7
- **Emotional distress**: 1.8 ± 0.7 ; n=8

**Specialised PC**

- **Specific population**: 4.1 ± 1.1 ; n=11
- **Rapidly evolving illness**: 3.2 ± 1.8 ; n=5
- **Need for complex and intense continuing care**: 3.0 ± 1.5 ; n=12
- **Persistent and distressing symptoms**: 4.4 ± 0.6 ; n=27
- **≥ 3 symptoms > 5 on ESAS**: 3.8 ± 1.5 ; n=8
- **Uncontrolled pain**: 3.2 ± 1.2 ; n=9
- **Difficulties in assessing symptoms**: 3.8 ± 0.9 ; n=18
- **Severe psychological and/or existential distress**: 2.6 ± 1.0 ; n=18
- **Request for assisted suicide or euthanasia**: 1.4 ± 1.1 ; n=8
- **Psychosocial distress patient and/or relatives**: 2.5 ± 0.9 ; n=17
- **Difficulties in integrating information about the disease and/or prognosis**: 1.0 ± 0.0 ; n=1
- **Lack or insufficient support from relatives**: 2.0 ± 1.0 ; n=3
- **Social vulnerability**: 2.0 ± 0.0 ; n=1
- **Accompanying the patient is difficult**: 1.4 ± 0.8 ; n=7
- **Difficulties in communicating about therapeutic/care objectives**: 1.8 ± 0.4 ; n=6
- **Significant disagreement, uncertainty or conflict**: 2.5 ± 1.5 ; n=21
- **Need for support and/or second opinion for current decision-making**: 1.9 ± 0.8 ; n=9
- **Difficulties in writing advanced directives**: n=0
- **Specialised PC team required by healthcare professional**: 3.6 ± 1
- **Palliative sedation envisaged**: 2.6 ± 1
- **Need for respite for the relatives**: 1.3 ± 0

In italic are the items chosen for the final version of the instrument.
Figure 1: Delphi process flowchart

- Invitation for Delphi (n = 66)
- Acceptation for Delphi (n = 42)
- Round 1
  - Response: 36/42 (86%)
- Invitation for round 2 (n = 36)
- Round 2
  - Response: 31/36 (86%)
- Invitation for round 3 (n = 42)
- Round 3
  - Response: 29/42 (69%)
Figure 1

Delphi process flowchart