

## ONCOLOGY NURSING CARE AND QUALIFICATION DEMANDS IN PRIMARY HEALTH CARE

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**ABSTRACT:** The objective in this study was to identify the oncology care and qualification demands of nurses working in primary health care. Observational and descriptive study developed at the Health Centers in Florianópolis, Santa Catarina, Brazil. The data were collected between October and November 2015. The research variables were related to education, length of professional experience, care demand and qualification deficiencies in oncology. The study participants were 84 nurses; 41 (48.81%) had graduated more than ten years earlier ( $12.04 \pm 6.99$ ); 46 (54.76%) consider that their learning about oncology at the undergraduate level was insufficient and indicate no further qualification in this area after graduating. The main care and qualification deficiency demands involve the most incident malignant tumors, the impact of cancer, oncology therapeutics and their side effects. The data evidence that, despite the experience in primary health care, many professionals feel the need for training that enables them to deliver specialized and qualified care.

**DESCRIPTORS:** Nursing; Oncology; Professional education; Primary health care.

### DEMANDAS DE ATENDIMENTO DE ENFERMAGEM E DE QUALIFICAÇÃO EM ONCOLOGIA NA ATENÇÃO BÁSICA EM SAÚDE

**RESUMO:** O objetivo deste estudo foi identificar as demandas de atendimento e de qualificação em Oncologia dos enfermeiros atuantes na Atenção Básica. Estudo observacional, descritivo, realizado nos Centros de Saúde de Florianópolis, Santa Catarina, Brasil. A coleta de dados ocorreu entre outubro e novembro de 2015. Investigou variáveis relacionadas à formação, tempo de atuação profissional, demanda de atendimento e déficits de qualificação em oncologia. Participaram do estudo 84 enfermeiros; 41 (48,81%) formados há mais de dez anos ( $12,04 \pm 6,99$ ); 46 (54,76%) consideram insuficiente o aprendizado sobre oncologia na graduação e referem ausência de aperfeiçoamento nesta área após a formação. As principais demandas de atendimento e de déficit de qualificação envolvem as neoplasias malignas mais incidentes, o impacto do câncer, as terapêuticas oncológicas e seus efeitos colaterais. Os dados evidenciam que, apesar da experiência na atenção básica, muitos profissionais sentem a necessidade de capacitações que os habilitem ao atendimento especializado e qualificado.

**DESCRIPTORES:** Enfermagem; Oncologia; Capacitação profissional; Atenção primária à saúde.

### DEMANDAS DE ATENCIÓN DE ENFERMERÍA Y DE CUALIFICACIÓN EN ONCOLOGÍA EN LA ATENCIÓN BÁSICA DE SALUD

**RESUMEN:** El objetivo de este estudio fue identificar las demandas de atención y de cualificación en Oncología de los enfermeros que actúan en la Atención Básica. Estudio observacional, descriptivo, desarrollado en los Centros de Salud de Florianópolis, Santa Catarina, Brasil. Los datos fueron recolectados entre octubre y noviembre del 2015. Investigó variables relacionadas a la formación, tiempo de actuación profesional, demanda de atención y déficits de cualificación en oncología. Participaron del estudio 84 enfermeros; 41 (48,81%) formados desde hace más de diez años ( $12,04 \pm 6,99$ ); 46 (54,76%) consideran insuficiente el aprendizaje sobre oncología en el pregrado y refieren ausencia de perfeccionamiento en esta área tras la formación. Las principales demandas de atención y de déficit de cualificación implican las neoplasias malignas más incidentes, el impacto del cáncer, las terapéuticas oncológicas y sus efectos colaterales. Los datos evidencian que, a pesar de la experiencia en la atención básica, muchos profesionales sienten la necesidad de capacitaciones que les habiliten a la atención especializada y cualificada.

**DESCRIPTORES:** Enfermería; Oncología; Capacitación profesional; Atención primaria de salud.

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## ● INTRODUCTION

In the past decades, cancer has gained worldwide relevance, given the evidences of the epidemiological profile in Brazil and in the world. Thus, it has been considered a public health problem. The demographic transformations deriving from population aging, industrialization, urbanization, advances in science and technology, new lifestyles and exposure to risk factors for cancer are increasing the morbidity and mortality rates caused by the disease and worrying governments and society<sup>(1)</sup>.

The Brazilian National Cancer Institute (INCA) states that the prevention and control of cancer need to be given the same focus and attention given to the area of care services, as the increasing number of new cases of cancer will cause that, in the coming decades, the public health system does not have sufficient financial and human resources to meet the oncological demand in the country. This condition may contribute to premature and unnecessary deaths<sup>(1)</sup>.

The International Agency for Research on Cancer (IARC), linked to the World Health Organization (WHO), affirms the incidence of 14.1 million new cases of cancer and a total of 8.2 million deaths each year throughout the world. By 2030 the IARC states that there will be around 21.4 million new cases of cancer in the world and 13.2 million deaths from cancer<sup>(2)</sup>. INCA estimates that around 600,000 new cases of cancer will occur in Brazil in 2016/2017, which reinforces the magnitude of the cancer problem in the country<sup>(1)</sup>.

Regarding the training and specialization of human resources in care for people with suspected or diagnosed cancer or cancer survivors, there is a considerable gap related to the nursing training for the oncological demands in the process of living and dying, a gap that begins at the undergraduate level. Most nursing undergraduate courses in Brazil do not deal with oncology and oncological nursing<sup>(3-6)</sup>, although cancer is an expressive public health problem with worrying estimates for the future, as already pointed out previously.

One study identified the oncology qualification demands for different health professional categories in the various regions of the country. The results pointed out that the priority subjects for qualification in the Brazilian demand were: professional activities involving cancer patients in primary care (65.8%), followed by outpatient care (64.4%), basic notions of cancer control and prevention (63.7%), professional activities involving cancer patients in the hospital context (61.6%), and in palliative care (61.2%)<sup>(7)</sup>. In the research concerning nurses, this study identified that the subjects in greatest need of qualification were: basic notions of cancer control and prevention (71.5%), professional activities in health promotion and prevention of diseases directed at oncology (69.4%), professional performance involving oncology outpatients (67.2%), management and public policies for cancer care (66.7%)<sup>(7-8)</sup>.

In the same study, it was appointed that nurses referred to the increasing insertion of professionals in primary health care as a justification for greater qualification in oncology, considering the potential benefits that this could bring to the population. In this context, they mentioned the lack of oncology nurses. It should be noted that the need to qualify nursing was mentioned throughout the care line, ranging from the least to the most complex procedures<sup>(7-8)</sup>.

The findings mentioned arouse reflections about the need to qualify nurses to take care of Unified Health System (SUS) users diagnosed with cancer. Therefore, the following question is asked in this study: what are the demands for qualification in oncology observed by nurses working in primary health care in the city of Florianópolis, state of Santa Catarina? The objective was: to identify the demands for qualification in oncology of nurses working in primary health care in the city of Florianópolis-SC.

Given the incidence and prevalence of the disease found today and the expected magnitude for the near future, we can see the relevance of this study in order to improve the qualification of primary care nursing professionals, addressing the care related to cancer patients. And, for this to happen, first, we need to identify the qualification demands of this professional category, so that strategies can be created to improve this qualification. It should be emphasized that basic care is directly related to the new public policies that highlight the promotion of health and care, using the various services offered by the SUS care network.

These study results will contribute to the elaboration of a virtual learning environment for the

professionals in the research context, containing their qualification demands, aiming to enhance the consolidation of continuing education strategies.

## ● METHOD

Observational and descriptive study carried out in the Health Districts of the city of Florianópolis-SC. Nurses were included in the study who were nurses working in the Health Centers of the Health Districts: Center, Mainland, East, North and South (55 Health Centers). These Districts employ 162 nurses (study population).

The established sampling, with a 10% sampling error and 99% confidence level, consisted of 83 nurses, but 84 nurses were included in the study. The sample was calculated to define the minimum sample required, but all the nurses working in the study scenario were invited for inclusion in the study.

The inclusion criterion defined for the selection of participants involved being a nurse working in the study context, regardless of the length of experience. Exclusions were due to leaves related to vacations, medical certificates, leaves of absence or similar at the time of data collection (about 50 professionals). Resident nurses were also excluded. About 28 professionals chose not to be included in the study.

Data collection was performed in October and November 2015, during the monthly meetings of the nurses in each Health District, through a questionnaire with open and closed questions. The study variables investigated data related to the education, length of professional experience in primary and oncology care, oncology care demands, oncology qualification deficiencies for care to SUS users, whether children, adolescents and / or adults with suspected or confirmed diagnosis of cancer of cancer survivors in primary health care in Florianópolis-SC.

The collected data were recorded in spreadsheets built in Microsoft Excel, grouped by similarity and submitted to descriptive statistical analysis (measures of frequency, mean and standard deviation), then discussed in the light of the scientific literature on the subject.

The study was developed in compliance with the legal determinations for research involving human beings and received approval from the Research Ethics Committee, opinion number 1,238,414. The anonymity of the participants was guaranteed through the delivery of the questionnaires without identification of the participants.

## ● RESULTS

In total, 162 (100%) nurses worked in the Health Districts where the study was carried out, and 84 nurses (51.85%) accepted to participate.

Of the 84 (100%) professionals included in the study, 23 (27.38%) worked in the Central District, 21 (25%) Mainland District, 15 (17.86%) East District, nine (10.71%) South District and 16 (19.05%) in the North District.

Regarding the time since graduation, one (1.19%) nurse had graduated one year ago; nine (10.71%) between one and five years; 33 (39.28%) between six and 10 years; 41 (48.81%) for more than 10 years ( $12.04 \pm 6.99$ ). Regarding the experience in primary health care, five (5.95%) had up to one year of experience; 26 (30.95%) between one and five years; 27 (32.14%) between six and 10 years; and 26 (30.95%) more than 10 years ( $6.62 \pm 6.05$ ).

What the experience in oncology nursing care beyond primary health care is concerned, 73 participants (86.9%) had no experience, six (7.14%) had up to one year of experience, three (3.57%) between one and five years and two (2.38%) six years or more ( $8.62 \pm 6.05$ ).

Most of the nurses, 52 (61.9%), graduated from the Undergraduate Nursing Course of Universidade Federal de Santa Catarina (UFSC), eight (9.52%) from Universidade do Vale do Itajaí (UNIVALI), four

(4.76%) from Universidade do Sul de Santa Catarina (UNISUL), 16 (19.05%) from other educational institutions in the State of Santa Catarina, Rio Grande do Sul and Paraná, one (1.19%) from the State of Bahia and three (3.57%) did not answer.

The nurses' evaluation of the theoretical and practical oncology contents learned in undergraduate nursing was equivalent to: no participant considered these were excellent, eight (9.53%) good, 30 (35.71%) regular, and 46 (54.76%) insufficient.

Three nurses (3.57%) declared further qualification in oncology (3.57%). The improvements mentioned were: Specialization Course in Oncology Nursing in Network Systems promoted by Universidade Federal de Santa Catarina and the course ABC do Câncer offered at a distance by INCA.

When asked about the oncology care demands the nurses working at the health centers are facing, four participants (4.76%) chose not to respond. The answers recorded in the questionnaires were grouped into 21 demands. Of these demands, the five most cited were: malignant neoplasms: cancer of the breast, uterus, intestine, prostate, lung, thyroid, skin, head and neck, esophagus, liver, cancers associated with comorbidities, leukemia, lymphoma; impact of cancer in children, adolescents, adults and the family; chemotherapy and post-chemotherapy treatment; care after cessation of cancer therapy; exams for cancer control. Table 1 presents all oncology care demands in the study scenario.

Table 1 – Care demands for SUS users in primary health care according to nurses. Florianópolis, SC, Brazil, 2015

Care demands	n*	%
Malignant neoplasms: breast (19), uterus (13), intestine (11), prostate (4), lung (4), thyroid (4), skin (3), head and neck (2), esophagus (1), liver (1), cancers associated with comorbidities (2), leukemia (4), lymphoma (1)**	69	36.70
Impact of cancer on the child, adolescent, adult and family	12	6.38
Care after cessation of cancer therapy	11	5.85
Exams for cancer control	11	5.85
Chemotherapy (7) and post-chemotherapy treatment (3)**	10	5.31
Nursing procedures	8	4.25
Stoma care	8	4.25
Pre (2) and postoperative phases (6)**	8	4.25
Palliative care	7	3.72
Forwarding in Health Care Network	7	3.72
Side effects of oncology treatments	6	3.19
Diagnostic phase of cancer	4	2.12
Post-discharge phase of cancer treatment	4	2.12
Rights of oncology users	4	2.12
Home visit	4	2.12
Radiotherapy and post-radiotherapy care	4	2.12
Cancer prevention	3	1.59
Quality of life	2	1.06
Acute pain in cancer patients	2	1.06
Provision and instructions – oncology drug prescriptions	2	1.06
Delivery and instructions for use of prescribed drugs	2	1.06
Total	188	100

Source: Research data.

\*Citation frequency of the demand by all nurses included in the study.

\*\*To facilitate the presentation of the demands, some were grouped, but the absolute frequency was registered per item.

Regarding the demands for qualification in oncology (qualification deficits), the participants listed 23 demands that were grouped by similarity. It is noteworthy that a participant could suggest more than one demand. Of these, the five most cited were: malignancies and related care - breast, uterine, lung, liver, prostate cancer, metastases, cancer relapse and specialized care by type of cancer; therapeutics in cancer control; side effects caused by cancer therapies; impact of cancer in children, adolescents, adults and the family; and care and support network for cancer patients. Table 2 shows the total findings.

Table 2 – Qualification demands/deficiencies in care for SUS users in primary health care according to nurses. Florianópolis, SC, Brazil, 2015

Qualification demands/deficiencies	n*	%
Malignant neoplasms and care related to: cancer of the breast (4), uterus (3), lung (1), liver (1), prostate (1), metastases (1), cancer relapse (1) and specialized care per type of cancer (12)**	24	14.81
Therapeutics in cancer control	20	12.34
Side effects caused by oncology treatments	18	11.11
Impact of cancer on the child, adolescent, adult and family	17	10.49
Care and support network for cancer patients	15	9.25
Cancer diagnosis (6) and prognosis (2)**	8	4.93
Continuing education in oncology	6	3.70
Palliative care for oncology patients	6	3.70
Rights of oncology patients	6	3.70
Oncology drug therapy	5	3.08
Functioning and routines of CEPON – Oncology Research Center	5	3.08
Care for wounds (2), stomas (2) and tracheotomies (1)**	5	3.08
Control exams and their changes	4	2.46
Signs and symptoms of cancer and early diagnosis	4	2.46
Postoperative (2) and post-mastectomy care (2)**	4	2.46
Cancer prevention (1) and screening (3)**	4	2.46
Home care	3	1.85
Nursing procedures	2	1.23
Vaginal stenosis	2	1.23
Quality of care	1	0.61
Care for semi-implanted catheter	1	0.61
Care per age range	1	0.61
Food in the cancer context	1	0.61
Total	162	100

Source: Research data.

\*Citation frequency of the demand by all nurses included in the study.

\*\*To facilitate the presentation of the demands, some were grouped, but the absolute frequency was registered per item mentioned.

## ● DISCUSSION

Regarding the time since graduation and length of experience in basic care, it was observed that most participants are experienced in this context. The relationship between the time since graduation, length of professional experience and length of experience in the same job context enhances the professionals' competence for professional practice, entailing better possibilities for decision making



and better results to be achieved, in this case for people with primary health care needs.

The undergraduate nursing degree reveals nurses' competences and skills, which are consolidated by continuous learning, encompassing a set of social and communicational learning. It is an attribute conquered through individual actions for the acquisition and construction of knowledge on a theme, but which needs to be based on the demands of the concrete work situations that involve the construction on sociocultural, historical and continuing education bases. Competent professionals know how to act responsibly, are acknowledged by their peers; know how to mobilize, integrate and "transfer" their knowledge and skills in a given professional context<sup>(9-10)</sup>.

Despite the study participants' length of professional experience, however, they themselves reveal the lack of and/or insufficient education and the qualification needs to care for adults, children, adolescents and survivors with confirmed or suspected cancer. This lack is characterized by deficiencies in training and continuing education practices, as the large majority of participants point to this condition.

The INCA, being the guiding agency for oncological actions in Brazil, also affirms the lack of professional training for oncology care in all professional categories, and that qualification deficiencies stand out in primary health care<sup>(7)</sup>.

So how can the necessary competence (knowledge, skill and attitude) be achieved in a scenario of lack of training and continuing education? How can the right decisions be made? How can we contribute to the improvement of health care thinking about the effectiveness of the public health system (quality of care, better outcomes at the lowest possible costs)?

The best decisions in health care, among other aspects, involve: the evaluation of the users' real needs; the accomplishment of work based on planning that considers detailed information; critical thinking (acquired through competent education and professional experience) on the situations, based on the analysis and judgment of the perspectives of each action proposal and its developments; logical and intuitive reasoning; evaluation of the process; development of institutional culture to meet the needs of the population; and review of behavior models<sup>(11)</sup>.

Therefore, continuing education activities, according to the guidelines of the Ministry of Health, can guarantee the maintenance of the nursing team's competence<sup>(11)</sup> for care to SUS users in primary health care and in the oncology context.

In addition to continuing education, it is crucial to change training curricula to meet the needs of the Brazilian population. Curricula need to approximate the theory of practice and the social needs, as cancer is one of the most incident and most fatal diseases in Brazil and around the world.

In addition, estimates of cancer tend to rise in the coming decades. Also, this demand includes a larger number of survivors, people in relapse of the disease and in palliative care because, with the technological development, the control of the disease is increasing. Cure has not yet been achieved in the same proportion though. Thus, the survival of cancer entails the care needs of healthcare professionals, so that they can attend to people at any stage of the disease and health condition.

Currently, the greatest portion of cancer patient care still occurs in high complexity care, but the demographic and epidemiological change and the need for equity and integrality in public health make it necessary for care to truly take place in a care network. This is a prerogative of the SUS and needs to be implemented by articulating the points of the network for the benefit of the population.

The labor market in health has been transformed by economic, technological and social policies, and these transformations require urgent reformulations of educational institutions, which prepare the health professionals. Only then will the graduates meet the new demands and solve the problems. The challenge of nursing higher education institutions should be to prepare nurses with technical and political competence, as social subjects endowed with knowledge, reasoning for the issues of life and society issues, training them for the best intervention<sup>(9)</sup>.

Considering that most of the study participants graduated from UFSC, UNIVALI and UNISUL, it is evident that these educational institutions need to adapt their course contents, so that graduated nursing professionals can feel apt for minimum care to patients with confirmed or suspected cancer at all care levels in the SUS.

This is extended as a social commitment and a return to the users, keeping in mind that most participants obtained their undergraduate nursing degree from a public institution. It is up to public higher education institutions to grant a return to society, which funds their existence. For decades, cancer has been a public health problem, affecting individuals, families and society itself. When we notice the countless premature deaths and disabilities the disease causes, it is urgent to change the education process in articulation with the changes in public policies established in recent years, which evidence health promotion, network care and professional competence.

With regard to the demands for care, the most prevalent demands are related to the most incident pathologies in the oncological scope, followed by the fact that this situation has an impact on the individual and family. Therefore, addressing the impact of cancer on the individual and the family can be a weakness of the professionals, since this should contain significant contents aimed at the psycho-emotional aspects of cancer. It is important to emphasize that not all health professionals feel able to work on some of the psycho-emotional dimensions involved in chronic illness, especially when talking about cancer, which in itself entails connotations of anticipated finiteness and suffering.

In the research context, the great demand linked to the most prevalent cancers was highlighted, confirming the epidemiological trends of the indicators published by the Ministry of Health and international agencies. Qualifying for the understanding of the most prevalent cancers, linked to the impact they trigger on the individual and the family, is also reflected in the qualification deficiencies the study participants evidenced.

In terms of qualification deficiencies, the convergence between the main services and the need to be qualified for them is noticed. The qualification deficiencies contain well-outlined technical dimensions, such as wound care, the use of tracheotomies, among others. The data found show the need for training to understand the most prevalent cancers though, their forms of treatment and their psycho-emotional approach related to their impact, that is, the main care demands are also the main demands for qualification.

The study participants' need for information was also evidenced regarding the interlocution with the institution that attends to SUS cancer patients, being mainly the CEPON. Understanding the care flow of the cancer user and the SUS care network is crucial for all professionals and for the quality of care.

The incidence and prevalence of cancer require a higher level of knowledge of health professionals at the different healthcare levels within the SUS, justifying the need for training and continuing education for all nurses, ranging from those who work in exclusively oncological hospitals to those who work in primary health care<sup>(12)</sup>. On the other hand, the close relationship between health and education institutions can contribute to the technical and scientific qualification of nurses<sup>(13)</sup>.

## ● CONCLUSION

These study results show the reality of nurses who work in primary health care and who attend to users diagnosed and under treatment for cancer, evidencing important demands for care and knowledge deficiencies that may contribute to the qualification of care. These major demands include the most incident cancers, the impact of cancer, oncological therapies and related nursing care, and the oncology care and support network.

The results also reveal that nurses, even though they have been working for some time in primary health care, lack the skills that enable them to provide even more qualified care. Thus, we could perceive that the institutions training these professionals still do not offer knowledge about cancer and all of its developments in their curriculum. This explains the absence of training that provides greater security in the approach of patients' oncological questions. These aspects result in the qualification needs the study participants appointed, which should be minimized through continuing education.

As a study limitation, the use of exclusive open questions for data collection to identify the qualification deficiencies is registered. The use of open and closed questions could have broadened the study results.

## ● REFERENCES

1. Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Coordenação de Prevenção e Vigilância. Estimativa 2016: incidência de câncer no Brasil. [Internet] Rio de Janeiro: INCA; 2015 [acesso em 19 mai 2017]. Disponível: <http://www.inca.gov.br/estimativa/2016/>.
2. World Health Organization (WHO). International Agency for Research on Cancer. Globocan 2012: estimated cancer incidence, mortality and prevalence worldwide in 2012. [Internet] Lyon/France: IARC; 2014 [acesso em 10 dez 2016]. Disponível: <http://globocan.iarc.fr/Default.aspx>.
3. da Silva AF, Issi HB, Botene DZA, da Motta MGC. Cuidados paliativos em oncologia pediátrica: percepções, saberes e práticas na perspectiva da equipe multiprofissional. Rev. Gaúcha Enferm. [Internet] 2015;36(2) [acesso em 12 dez 2016]. Disponível: <http://seer.ufrgs.br/index.php/RevistaGauchadeEnfermagem/article/view/46299>.
4. dos Santos JL, Corral-Mulato S, Bueno SMV. Morte e luto: a importância da educação para o profissional de saúde. Arq. Cienc. Saúde UNIPAR. [Internet] 2014;18(3) [acesso em 10 dez 2016]. Disponível: <http://revistas.unipar.br/index.php/saude/article/view/5196>.
5. da Silva MM, de Santanda NGM, Santos MC, Cirilo JD, Barrocas DLR, Moreira MC. Cuidados paliativos na assistência de alta complexidade em oncologia: percepção de enfermeiros. Esc. Anna Nery. [Internet] 2015;19(3) [acesso em 01 set 2016]. Disponível: <http://dx.doi.org/10.5935/1414-8145.20150061>.
6. Calil AM, Prado C. Ensino de oncologia na formação do enfermeiro. Rev. bras. enferm. Brasília. [Internet] 2010;63(4) [acesso em 09 dez 2016]. Disponível: <http://dx.doi.org/10.1590/S0034-71672010000400026>.
7. Thuler LCS, Bergmann A, Ferreira SC. Ensino em atenção oncológica no Brasil: carências e oportunidades. Rev. bras. cancerol. [Internet] 2011;57(4) [acesso em 29 nov 2016]. Disponível: [http://www.inca.gov.br/Rbc/n\\_57/v04/pdf/02\\_artigo\\_ensino\\_atencao\\_oncologica\\_brasil\\_carencia\\_oportunidades.pdf](http://www.inca.gov.br/Rbc/n_57/v04/pdf/02_artigo_ensino_atencao_oncologica_brasil_carencia_oportunidades.pdf).
8. Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Coordenação Geral de Ações Estratégicas. Coordenação de Educação. Anke B, Thuler LCS, Canavarro SF, organizadores. Ensino em atenção oncológica no Brasil: carências e oportunidades [Internet] Rio de Janeiro: Inca; 2012 [acesso em 19 mai 2017]. Disponível: [http://bvsmis.saude.gov.br/bvs/publicacoes/ensino\\_atencao\\_oncologica\\_brasil.pdf](http://bvsmis.saude.gov.br/bvs/publicacoes/ensino_atencao_oncologica_brasil.pdf).
9. Henriques SHH, Silva VLS, Laus AM, Chaves LDP. Perfil profissional de enfermeiros atuantes em unidades de terapia intensiva de um hospital de ensino. Ciencia y Enferm. [Internet] 2013;19(3) [acesso em 04 mar 2016]. Disponível: <http://dx.doi.org/10.4067/S0717-95532013000300006>.
10. Kobayashi RM, Leite MMJ. Desenvolvendo competências profissionais dos enfermeiros em serviço. Rev. bras. enferm. [Internet] 2010;63(2) [acesso em 03 mar 2016]. Disponível: <http://dx.doi.org/10.1590/S0034-71672010000200012>.
11. Camelo SHH. Competência profissional do enfermeiro para atuar em Unidades de Terapia Intensiva: uma revisão integrativa. Rev. Latino-Am. Enfermagem. [Internet] 2012;20(1) [acesso em 12 dez 2016]. Disponível: <http://dx.doi.org/10.1590/S0104-11692012000100025>.
12. da Cruz FS, Rossato LG. Cuidados com o Paciente Oncológico em Tratamento Quimioterápico: o Conhecimento dos Enfermeiros da Estratégia Saúde da Família. Rev. bras. cancerol. [Internet] 2015;61(4) [acesso em 05 dez 2016]. Disponível: [http://www1.inca.gov.br/rbc/n\\_61/v04/pdf/04-artigo-cuidados-com-o-paciente-oncologico-em-tratamento-quimioterapico-o-conhecimento-dos-enfermeiros-da-estrategia-saude-da-familia.pdf](http://www1.inca.gov.br/rbc/n_61/v04/pdf/04-artigo-cuidados-com-o-paciente-oncologico-em-tratamento-quimioterapico-o-conhecimento-dos-enfermeiros-da-estrategia-saude-da-familia.pdf).
13. Salimena AMO, Teixeira SR, Amorim TV, Paiva ACPC, Melo MCSC. O vivido dos enfermeiros no cuidado ao paciente oncológico. Cogitare Enferm. [Internet] 2013;18(1) [acesso em 03 nov 2016]. Disponível: <http://dx.doi.org/10.5380/ce.v18i1.31320>.