Integrative Review =

Rural nursing formation possibilities: integrative review

Possibilidades de formação em enfermagem rural: revisão integrativa Posibilidades de formación en enfermería rural: revisión integrativa

Ângela Roberta Alves Lima¹
Eliana Buss¹
Maria del Carmen Solano Ruiz²
José Siles González²
Rita Maria Heck¹

Keywords

Rural nursing; Nursing education; Continuing education; Professional training; Rural population health

Descritores

Enfermagem rural; Educação em enfermagem; Educação continuada; Capacitação profissional; Saúde da população rural

Descriptores

Enfermería rural; Educación en enfermería; Educación contínua; Capacitación profesional; Salud de la población rural

Submitted

August 15, 2018

Accepted

December 11, 2018

Abstract

Objective: To understand the formation process in international rural nursing and the repercussions on formation and practice in Brazil.

Methods: Integrative review composed of six stages. Data were collected in March 2018 in PubMed and Direct Science with the descriptor 'Rural nursing' and the keyword 'formation' by combining the Boolean operators 'AND' and 'OR'. Original articles from the previous ten years in in Portuguese, Spanish and English that met the inclusion criteria were eligible. Qualitative analysis was performed with the construction of subsets and topics.

Results: Inclusion of 13 articles addressing: nursing undergraduate course, distance learning undergraduate courses; curricular internships in rural health services and simulated activity with cases of rural families. Post-graduation: postgraduate internship in rural health unit, advanced nursing practice (ANP) course with emphasis on the rural setting, and the need for continuing education activity in rural nursing.

Conclusion: The analysis of studies demonstrated that strategies of qualification of rural health professionals can be applied in different ways,

Conclusion: The analysis of studies demonstrated that strategies of qualification of rural health professionals can be applied in different ways, with use of several methodologies and associated technologies according to professionals' needs and availability. A range of possibilities can be discussed and developed by nursing for the qualification and consolidation of rural nursing practice in Brazil.

Resumo

Objetivo: Conhecer o processo de formação em enfermagem rural internacional e as repercussões na formação e prática no Brasil.

Métodos: Revisão integrativa composta por seis etapas. Os dados foram coletados no mês de março de 2018, nas bases PubMed, Direct Science, com o descritor "Rural nursing" e a palavra-chave "formation", com a combinação dos operadores booleanos "AND" e "OR". Foram elegíveis artigos dos últimos 10 anos, originais, nos idiomas: português, espanhol e inglês, coadunando aos critérios de inclusão e exclusão. Realizou-se análise qualitativa com a construção de subconjuntos e tópicos.

Resultados: Totalizou-se 13 artigos abordando: graduação em enfermagem, cursos de graduação à distância; estágios curriculares em serviços de saúde rural e atividade simulada com casos de familias rurais. Pós-graduação: estágio de pós-graduando em unidade de saúde rural, curso de prática de enfermagem avançada com ênfase no contexto rural e a necessidade de atividade de educação permanente em enfermagem rural. Conclusão: Os estudos analisados evidenciam que as estratégias de qualificação dos profissionais de saúde rural podem ser realizadas de diferentes formas, com a utilização de várias metodologias e tecnologias associadas, conforme a necessidade e disponibilidade dos profissionais, apresentando-se como um leque de possibilidades a serem discutidas e desenvolvidas pela enfermagem, para a qualificação e consolidação da prática da enfermagem rural no Brasil.

Resumen

Objetivo: Conocer el proceso de formación en enfermería rural internacional y las repercusiones en la formación y práctica en Brasil. Métodos: Revisión integrativa compuesta por seis etapas. Los datos fueron recolectados en el mes de marzo de 2018, en las bases PubMed, Direct Science, con el descriptor "Rural" y la palabra clave "formation", con la combinación de los operadores booleanos "AND" y "OR". Eran artículos elegibles de los últimos 10 años, los documentos en los idiomas: portugués, español e inglés, conciliaron los criterios de inclusión y exclusión. Se realizó un análisis cualitativo con la construcción de subconjuntos y tópicos.

Resultados: Un total de 13 artículos abordando: graduación en enfermería, cúrsos de graduación a distancia; las prácticas curriculares en servicios de salud rural y la actividad simulada con casos de familias rurales. Postgrado: etapa de postgrado en unidad de salud rural, curso de práctica de enfermería avanzada con énfasis en el contexto rural y la necesidad de actividad de educación permanente en enfermería rural. Conclusión: Los estudios analizados evidencian que las estrategias de calificación de los profesionales de salud rural pueden ser realizadas de diferentes formas, con la utilización de varias metodologías y tecnologías asociadas, según la necesidad y disponibilidad de los profesionales, presentándose como un abanico de posibilidades que podrán ser discutidas y desarrolladas por la enfermería, para la cualificación y consolidación de la enfermería rural en Brasil.

Corresponding author

Ângela Roberta Alves Lima https://orcid.org/0000-0003-1328-5570 E-mail: angelarobertalima@hotmail.com

DOI

http://dx.doi.org/10.1590/1982-0194201900016



How to cite:

Lima AR, Buss E, Ruiz MC, González JS, Heck RM. Possibilidades de formação em enfermagem rural: revisão integrativa. Acta Paul Enferm. 2019;32(1):113-9.

¹Universidade Federal de Pelotas, Pelotas, RS, Brazil. ²Universidad de Alicante, Alicante, Spain. **Conflicts of interest:** nothing to declare.

Introduction

Access to health in rural areas requires systematic efforts in order to address the shortage of professionals, quality of care and recognize inequalities such as high poverty rate, informal work, low educational level and prevalence of mortality from avoidable causes and infectious diseases.^(1,2)

In these territories, nurses find a population with different beliefs and practices from those of urban areas. Health is the possibility of developing everyday activities, and health needs are usually secondary to those of work. Therefore, many of these needs cannot be adequately cared for by applying nursing models developed in urban areas, because they require unique approaches with emphasis on specificities of this population. This challenge has driven the organization of rural nursing practice in countries such as Canada, the United States of America and Australia. The organization of practice occurred through important changes in legislation and professional formation by broadening the nurses' role and integrating research, education, management, and care practices. (3-6)

Currently, in Brazil, there is no formation that addresses this reality and contributes to break the cycle of invisibility of this population. The curricular bases guide that nursing formation should be generalist and offer contents, skills and abilities for meeting the social demands of health, ensure the integrality of care, and the quality and humanization of service. The prevalent and priority needs of the population must be considered according to the epidemiological picture of the country/region. (7,8) The inclusion of supervised internships in general and specialized hospitals, outpatient clinics, basic network of health services and communities in the curriculum is responsibility of the courses organization. (8) This means the offer of practice in rural communities will occur only when training units deem it necessary and/or when there are undergraduate students or professionals interested in the subject.

This scenario demonstrates the need to understand the formation process in international rural nursing and the repercussions on the formation and professional practice of rural nursing in Brazil.

Methods

This integrative review had six stages. (9) In the first one, was identified the research question 'how is developed the process of rural nursing formation internationally and the repercussions on nursing formation and practice in Brazil? In the second, were established the following inclusion criteria: (i) to present actions developed by nursing in nurses' formation for work in rural settings; (ii) to address qualification in rural nursing; (iii) to address aspects related to continuing education in the rural setting; and exclusion criteria: (i) review articles; (ii) publication before 2008; (vi) addressing formation for practice with indigenous and aboriginal populations.

The articles were identified by bibliographic search conducted in March 2018 in PubMed and Direct Science databases. The 'Rural nursing' descriptor and the keyword 'Formation' were used in combination with 'AND' and 'OR' Boolean operators. Recommendations of the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) were followed. In the advanced search in PubMed, were used Mesh terms and studies in humans. Original articles of the previous ten years in Portuguese, Spanish and English that met the inclusion criteria were considered eligible.

The search resulted in 278 articles, of which 169 were in PubMed and 109 in Science direct. After pre-screening, the titles and abstracts were read. At this stage, were excluded 22 review articles and 239 articles that did not meet the inclusion criteria. The 17 remaining articles were read in full to assess if they addressed rural nursing formation. Then, four articles were excluded because they addressed indigenous populations, and the final sample included 13 articles (Figure 1).

A new reading was made for organizing data in a previously designed form that included information from authors, country, institution, objective, methodology and results. After the organization, began the qualitative analysis⁽¹⁰⁾ with transversal reading of data and extraction of fragments, as presented in the results and final considerations. These data formed the following subsets: graduation, post-graduation and continuing education. Data of the subsets were

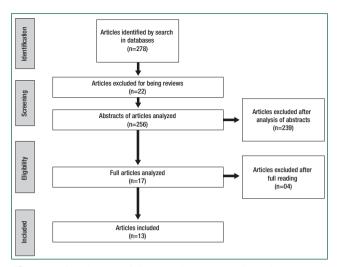


Figure 1. Database and the search strategy adopted

read for understanding the relevant structures that originated the topics, namely: Formation in international rural nursing and Repercussions on the professional practice of rural nursing in Brazil. The fifth and sixth stages involved the interpretation of results and presentation of evidence.

In this study, ethical aspects were taken into consideration by respecting the authorship of ideas, concepts and definitions present in the articles. The search was performed by two independent reviewers with a standardized protocol, descriptors and crossings in databases.

Results

Thirteen articles were selected, (4,5,11-21) of which 70% were indexed in the Science Direct database, 100% were in English, 36% from Australia, 29% from Canada, 21% from the USA, 7% from Norway, and 7% were multinational (USA-Canada). The year 2013 had the greatest amount of publications (30%).

Nursing graduation was addressed in 54% of studies that included distance learning, curricular internships in rural health services and simulated activity with cases of rural families. Postgraduate studies accounted for 30% of the sample and these works were focused on internships in a rural health unit and an advanced nursing practice (ANP) course in the rural setting. The need for continuing education was addressed in 16% of studies. These data are described in chart 1.

Chart 1. Synthesis of articles according to the rural nursing formation process and results

Country	Formation process	Results
Australia	Post-graduation: internship in rural unit ⁽¹¹⁾	Isolation and lack of bond with the team and community were overcome, and communication and relationship skills were acquired. The experience was favorable for the formation of professionals to work in the rural setting.
Australia	Post-graduation: internship using tutoring ⁽⁴⁾	Tutoring was identified as an alternative to rural nurses' formation. It provided a supportive and safe environment for the development of skills and competences. However, it was an unexplored resource in formation, with the potential to train professionals who recognize the regional and cultural characteristics of the community, one of the challenges of contemporary nursing.
USA	Post-graduation: advanced nursing practice course with emphasis on the rural setting ⁽¹²⁾	The course involved participatory learning and distance learning. Provided learning experiences to meet the specific health needs of rural populations.
Canada	Post-graduation: distance learning advanced nursing practice course with emphasis on the rural setting ^(1.5)	It favored the access to formation focused on rural practice. Nurses applied the knowledge and practices in their own workplace, and qualified the care provided.
USA	Graduation: simulated activity with cases of rural families ⁽¹⁴⁾	Met the teaching needs by recognizing the value of collaboration and teamwork. Students were trained to work in different rural settings.
Australia	Graduation: curricular internship in a rural health unit ⁽¹⁵⁾	Positively influenced students' learning and allowed their experience of care processes different from those in urban areas that require specific knowledge and skills.
Canada USA	Graduation: curricular internship in a rural health unit ⁽¹⁶⁾	Inserted the student in the community, gave opportunities for rural nursing practice and bonding with the community. Contributed to the return of former graduates to work with nurses in rural areas.
Australia	Graduation: curricular internship in a rural health unit(17)	Experience beyond clinical learning in rural nursing has contributed to build awareness about the importance of cultural, community and personal relationships in nursing care.
Canada	Graduation: curricular internship in a rural health unit ⁽²¹⁾	The preparation of students should include cognitive functions, psychological preparation and the acquisition of advanced clinical skills.
Australia	Graduation: distance learning undergraduate course for rural community students ⁽⁵⁾	The model provided a formation alternative by promoting the sustainability and viability of Australian rural health services.
Canada	Graduation: curricular internship in a rural health unit ⁽²⁰⁾	The internship in the rural setting presented many new situations and required clinical skills before insertion in the field, because students can feel overwhelmed in these situations.
USA	Continuing education ⁽¹⁹⁾	The need to perform activities for the paradigm shift favored the self-reflection and empowerment of the team and users with the aim to overcome the challenge of addressing controversial issues such as violence, female exploitation and moral harassment. Regarding care, the suggested themes were: patient safety; quality of care and management of the health unit.
Norway	Continuing education ⁽¹⁸⁾	Demonstrated the need to perform activities in the workplace. Activities at distance and flexible hours that do not occupy the entire work shift.

Discussion

Formation in international rural nursing

From data, we identified that the challenges of providing quality nursing care in a timely and humanized manner impelled the organization of education in rural nursing from the mid-nineties. (4,5,11-17,19,21)

The aims of this organization of education were: i) to increase the number of students recruited from rural areas; (ii) to encourage universities to assume the responsibility for the formation of advanced practice nurses to meet the needs of their geographic region by developing actions that meet the needs of the population; iii) to offer curricular internships in rural health units; iv) to develop continuing education and advanced practice formation that meet the needs of professionals working in rural areas.

Among the implemented strategies, are the creation of a distance learning bachelor's degree in nursing in Australia; (5,15) advanced practice courses in rural nursing (12,13) and curricular activities of internships in rural health units for undergraduates and recent graduates. (4,15-18,21) The main objective of these experiences was training nurses who were willing to work and live in the rural area. (4,5)

The distance learning bachelor's course in nursing linked the undergraduate student to an advanced practice nurse (Nurse Practitioner - NP). When students enrolled in the course, they started to have online educational activities, videoconference classes and developed community practices under the guidance and supervision of the local nurse. (5) The evaluation of the experience in 2008 (5) concluded that the model provided an alternative formation, and promoted the sustainability and viability of Australian rural health services. Canada and the USA undertook actions for recruiting rural community residents and offered internship programs in the communities where they lived with duration varying from one semester to over a year. The curricular internship in rural units was instituted for all undergraduates. In studies(14,15,18,21) that evaluated these experiences, was identified their influence in the learning of students and staff. Such experiences allowed students to define their caregiver role, and built a body of knowledge about rural care. The urgency of including students in the rural setting was emphasized, because they can experience various care processes that require specific knowledge and skills.

Undergraduate students and nurses have made recommendations such as: to include more practical activities in rural areas; change the curricula for incorporating knowledge about rural health care and cultural aspects of communities; to offer a postgraduate program in rural nursing and a specific preparation for insertion of nurses in rural communities. (22)

In another study, (21) was identified the need to know the demographics, population characteristics, current health trends, challenges of people living in the locality, morbidity and mortality rates, and available health services for the successful completion of the experience. The preparation of students should include cognitive functions such as: ability to solve problems and communicate with people with different educational levels, confidence, self-reflection, psychological preparation to deal with ambiguous situations, as well as acquisition of general clinical knowledge and skills.

Continuing education was addressed in two studies, (17,19) in which was found that nurses and other professionals of the team should list the most relevant and interesting needs in order to perform activities to meet the needs and interests of all.

Advanced Nursing Practice was addressed in two studies. (12,13) In the study from the USA, (12) was reported that given the need for accessible formation of nurses working in rural areas, the Victoria College instituted a distance learning course focused on the rural setting. The model recognized that community values, and family and community relationships are essential for successful health interventions, and sought to address the treatment process and desirable attributes for effective practice in the rural setting, including participatory action in the community.

Although the studies in this review show the need to insert actions of alternative care models that respect the cultural specificities of the community, they have a biologicistic and positivist view regarding nurses' formation and performance. Similarly,

in these studies is not considered the anthropological perspective in care and nursing, which is the connection between biological factors and forms of organizing everyday activities that seek to keep such perspective. (23)

In some studies^(5,13) were used Information and Communication Technologies (ICTs), which offer unexplored possibilities in these contexts of governance and enhance the development of autonomous subjects. In other studies,^(12,19) was shown the need of preparing nurses to meet the health needs of rural populations, which are recognized and treated from the point of view of the biomedical system. The approximation between nursing and the positivist paradigm recognizes only scientifically proven events and duly tested practices, which impels nursing to use only theoretically proven knowledge, and this is often far from the daily reality of care.

Given this reality, rural nursing needs to make knowledge available for utilitarian purposes, starting from the perspective of satisfying the human needs. This fact cannot be undertaken based on the positivist paradigm, because it does not recognize recommendations and questions not estimated previously and that can be controlled. This fact makes scientific theory descriptive and explanatory, but a nursing theory must be entirely devoted to guidance of individuals on the path of satisfying their needs. Thus, the evident need to be based on other paradigms that address this specificity. (24)

In some studies, were included cultural issues in care. (12,17,19) However, there is no concern with approximating popular and scientific knowledge, and the existence of other care systems than the Biomedical was not considered. Paradigms derived from sociology and anthropology enable new encounters and solutions that approach human beings, their habits, culture, mechanism of satisfaction of needs, education and environment, and they are useful in this process. (24)

Repercussions to the professional practice of rural nursing in Brazil

According to the analyzed studies, rural health professionals can acquire qualification by different

ways and using several methodologies and associated technologies. A range of possibilities can be discussed and developed by nursing for the qualification and consolidation of the rural practice in Brazil and worldwide.

These strategies corroborate the proposal of the 2017-2019 Operational Plan of the National Policy on Integral Health of the Population of the Countryside, Forest and Waters (Portuguese acronym: PNSIPCFA). (25) The aim of this plan is to qualify the health team and strengthen the access of these populations to health services in a timely manner by taking into account their needs and specificities.

Brazil and these other countries have sought strategies to promote the access of rural populations to health care networks in order to guarantee integrality of health care and attention to social and geographical specificities by strengthening medium and high complexity actions according to the needs and demands established by living conditions and the epidemiological profile.

In the Brazilian scenario, undergraduates are given the opportunity to experience the Rural Health Strategy, and the analyzed studies have mentioned the transformative potential of this teaching and learning process. It enables the exercise of reflexive thinking, symbolic expression, improves communication and the development of creative skills by contributing to work in rural settings after formation.

These experiences of practice in rural health units may impact directly in the labor deficit, and train more sensitive professionals for developing actions with a view to promote holistic care. Such care is distinguished from other types because it allows spontaneity, has more flexible structures, and enables the involvement of values, beliefs and feelings, (24) consequently facilitating the integration of knowledge and care practices.

The present review allowed a differentiated approach to rural nursing education in Brazil, which includes specific knowledge and skills, provides experience in rural areas, and strengthens the PNSIPCFA, the National Policy on Integrative and Complementary Practices (Portuguese acronym:

PNPICs) and the Popular Health Education Policy (Portuguese acronym: PEPS). Concomitantly, it offers the opportunity for rural nursing constructing paths that lead to the new theoretical and practical basis for nursing science. Hence, the rural population is empowered for decision-making that affects their life and care. Due to the limited number of databases consulted, the search did not return studies from Latin American and Caribbean countries that are geographically, culturally and socially closer to Brazil, and this could corroborate with the discussion.

Conclusion

Data demonstrated the need for training more autonomous professionals, who can adapt and build rural nursing knowledge and practices based on the needs and specificities of daily care. Moreover, the active participation of the population must be allowed with the aim to take greater responsibility in planning actions for solving their health problems. Regarding formation, in most cases, the content is focused more on satisfying goals than on the reality of students and their environment, and it contributes to form a body of knowledge distant from daily care. The same applies to rural nursing, as the curricula do not address issues related to this space, nor offer internship activities in rural health services. When reflecting on these contexts, emerges the doubt if the knowledge acquired in qualitative studies guided by interdisciplinary anthropological and environmental references that seek to rescue traditional care practices, and integrate environmental and social issues, is being adapted to the positivist nursing care model, giving feedback and strengthening the biomedical care system. In order to change this scenario, students should be included in their home territories with curricular internships in Health Units close to their residences. This can strengthen their cultural identity and approximate the future professional and the territory. The meaningful learning of nursing professionals has to be stimulated based on the knowledge they already have, which will produce a new meaning to the knowledge acquired, value the different knowledge and practices coming from their family care system, and improve the care for rural populations.

References

- Organização Mundial da Saúde (OMS). Increasing access to health workers in remote and rural areas through improved retention: global policy recommendations. Geneva: OMS; 2010.
- International Labour Organization. Global evidence on inequities in rural health protection: New data on rural deficits in health coverage for 174 countries. Geneva: International Labour Office; 2015.
- Australian Health Ministers. National Rural Health Strategy Update. Australian: Australian Health Ministers; 1996.
- Mills J, Francis K, Bonner A. Getting to know a stranger—rural nurses' experiences of mentoring: a grounded theory. Int J Nurs Stud. 2008;45(4):599–607.
- Latham H, Giffard L, Pollard M. University and health service partnership: a model to deliver undergraduate nurse education in rural Australia. Collegian. 2007;14(1):5–10.
- Lee HJ, Winters CA. Testing rural nursing theory: perceptions and needs of service providers. Online J Rural Nurs Health Care. 2004;4(1):51– 63
- Figueredo WN, Laitano AD, Santos VP, Dias AC, Silva GT, Teixeira GA. Didactic-pedagogical training in stricto sensu graduate programs in health sciences of federal universities in the northeastern region of Brazil. Acta Paul Enferm. 2017;30(5):497–503.
- Brasil. Ministério da Saúde. Parecer no. 1.133 de 7 de outubro de 2001. Dispõe as Diretrizes Curriculares para os cursos de graduação de Enfermagem, Farmácia, Medicina, Nutrição e Odontologia. Brasília (DF): Ministério da Saúde; 2001.
- Galvão CM, Sawada NO, Trevisan MA. Revisão sistemática: recurso que proporciona a incorporação das evidências na prática da enfermagem. Rev Lat Am Enfermagem. 2004;12(3):549–56.
- Minayo MC. Análise qualitativa: teoria, passos e fidedignidade. Ciênc Saúde Coletiva. 2012;17(3):621-6.
- Lea J, Cruickshank M. Supporting new graduate nurses making the transition to rural nursing practice: views from experienced rural nurses. J Clin Nurs. 2015;24(19-20):2826–34.
- Hauenstein EJ, Glick DF, Kane C, Kulbok P, Barbero E, Cox K. A model to develop advanced practice nurses for rural practice. J Prof Nurs. 2014;30(6):463–73.
- Place J, MacLeod M, John N, Adamack M, Lindsey AE. "Finding my own time": examining the spatially produced experiences of rural RNs in the rural nursing certificate program. Nurse Educ Today. 2012;32(5):581– 7.
- Tschetter L, Lubeck P, Fahrenwald N. Integrating QSEN and technology to address rural health care: initial outcomes. Clin Simul Nurs. 2013;9(10):e469–75.
- Pront L, Kelton M, Munt R, Hutton A. Living and learning in a rural environment: a nursing student perspective. Nurse Educ Today. 2013;33(3):281–5.

- Yonge OJ, Myrick F, Ferguson LM, Grundy Q. Nursing preceptorship experiences in rural settings: "I would work here for free". Nurse Educ Pract. 2013;13(2):125–31.
- Sanderson H, Lea J. Implementation of the Clinical Facilitation Model within an Australian rural setting: the role of the Clinical Facilitator. Nurse Educ Pract. 2012;12(6):333–9.
- Burman ME, Fahrenwald NL. Academic nursing leadership in a rural setting: different game, same standards. J Prof Nurs. 2018;34(2):128–33.
- Fairchild RM, Everly M, Bozarth L, Bauer R, Walters L, Sample M, et al. A qualitative study of continuing education needs of rural nursing unit staff: the nurse administrator's perspective. Nurse Educ Today. 2013;33(4):364–9.
- Skaalvik MW, Gaski M, Norbye B. Decentralized nursing education in northern Norway: a basis for continuing education to meet competence needs in rural Arctic healthcare services. Int J Circumpolar Health. 2014;73(1):25328.

- 21. Sedgwick MG, Yonge O. Undergraduate nursing students' preparedness to "go rural". Nurse Educ Today. 2008;28(5):620–6.
- 22. Organização Mundial da Saúde (OMS). Redução das desigualdades no período de uma geração. Igualdade na saúde através da ação sobre os seus determinantes sociais. Relatório Final da Comissão para os Determinantes Sociais da Saúde. Lisboa: OMS; 2010.
- Ceolin S, Gonzales JS, Ruiz MC, Heck RM. Theoretical bases of critical thinking in Ibero-American nursing: integrative literature review. Texto Contexto Enferm. 2017;26(4):e3830016.
- Siles JG. La utilidad práctica de la epistemología em laclarificación de la pertinencia teórica y metodológica en la disciplina enfermera. Index Enfermería. 2016;25(1):86-2.
- 25. Brasil. Ministério da Saúde. Secretaria de Gestão Estratégica e Participativa. Política Nacional de Saúde Integral das Populações do Campo e Floresta. Brasília (DF): Ministério da Saúde; 2013.