

Chapter x.x.x

**RURAL SEEDS:
INNOVATION AND RURAL HEALTH CARE**

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Introduction

Rural Seeds – or ‘World Rural Doctors in Training’ – is a network comprising largely of students and young doctors with an interest in rural medicine who collaborate closely with experienced doctors and other health professionals. Rural Seeds was established in 2016, following the success of the Rural Family Medicine Café in 2015 and Rural Health Success Stories in 2016. It was officially launched in 2017 at the 14th Wonca World Rural Health Conference in Cairns, Australia, as part of the conference’s ‘Call to Action’.¹

The aim of Rural Seeds is to be a worldwide network that raises awareness and improves the guidance in training for rural practice for people in the early stages of their career development. It uses the mentorship and knowledge available from the Wonca Working Party on Rural Practice (WWPRP) and also liaises with the Wonca Young Doctors’ Movement. One of its main aims is to contribute to the UN17 Sustainable Development Goals, especially goal number 10: ‘Reduce inequality within and among countries’ since inequality in access to health services still persists around the world, particularly in rural areas.²

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Rural Seeds works to identify rural health care needs in various regions and to understand what improvements can be made through the local and global rural community. While the main channel of communication is a Google Group, there are also other regional groups and social media spaces for involvement. To become a member of the network, a person needs to complete a form providing general information about themselves and their reasons for joining.

Box 1. Discovering Rural Seeds

- Forms for joining Rural Seeds: <http://bit.ly/RuralSeedsForm>
- Rural Seeds Twitter: @ruralseeds
- Rural Seeds Facebook: @ruralseeds
- Rural Café YouTube Channel: <http://bit.ly/RuralCafe>
- Rural Seeds YouTube Channel: <http://bit.ly/RuralSeedsYT>
- Rural Health Success Stories: <http://ruralhealthsuccess.blogspot.com/>

Some members have participated in advocacy aimed at university staff and national student associations, as a result of which college curricula have been changed, presentations have been given at conferences, and promotional content has been developed. These interventions have the potential to ‘spread the seeds’ of change within members and their communities.

The aim of this chapter is to present the activities being developed and undertaken by Rural Seeds, using data collected from social media and on-line questionnaires.

Student and young doctor advocacy

There are many disparities between the environments in which people in rural and remote areas live compared with those in urban areas. Among these are fewer health care professionals, higher rates of chronic diseases, lower breastfeeding rates and higher rates of infant mortality.^{3; 4}

Rural Seeds advocates for rural health by networking with medical students, young doctors and other health professionals, both virtually and in person. This is done via discussions regarding methods to improve rural health care, through the dissemination of information and the training of students and doctors. The goal is to reduce the social and occupational isolation of health care professionals working in rural and remote areas.

In this context, advocacy is a way to discuss and promote activities that may improve access to care and reduce health inequalities.⁵ It aims to influence decision makers to mobilise resources and support the implementation of policies that address the social determinants of health which underlie health inequity. As an important part of the health system, doctors should challenge health inequalities and advocate for their practices to contribute to the improvement of health care.^{5; 6}

The 'rural pipeline'

There are several factors that influence a doctor's choice to work in a rural environment. These include coming from a rural background themselves, exposure to rural health in the medical curriculum or during their training, and the rural working environment and living conditions.⁷ These factors influence the 'rural pipeline' which comprises the mechanisms that aim to encourage people to work in rural areas.⁸

Although studies show the value of the 'rural pipeline' to increasing the number of health professionals who choose rural practice, predictors of longer-term rural practice indicate that only some of these factors influence whether doctors actually remain in rural areas. Other factors – such as social, cultural and occupational influence, and community support for professionals – may, in fact, have a greater influence on how long they remain in rural practice.^{9; 10}

Isolation

One of the difficulties faced by doctors in rural and remote areas is isolation. Rural health professionals have more difficulty in referring patients and in obtaining specialist opinions, which causes anxiety, particularly for junior doctors.¹² A study of junior doctors in Pakistan demonstrated that fear of isolation, together with quality of life and career development, were factors that influenced their decision to choose to work in a rural environment.¹² The doctors in the study were concerned about the differences between the rural work environment and the infrastructure of a tertiary hospital, including the lack of availability of equipment, pharmaceuticals and medical supplies. Another study – undertaken in Pennsylvania with doctors who worked in both rural and urban areas – showed that the junior rural doctors were more likely to report career dissatisfaction and to leave due to stress and high work demands, exacerbated by isolation.¹³

The 'isolation' factor is also identified by medical students as an impediment to working in rural areas. In Botswana, research with third and fifth year medical students who had completed a placement in a rural practice showed that more than 70% of them considered that working in a rural area leads to professional isolation, career stagnation and lack of learning opportunities.¹⁴

A study in India showed that networking can provide academic and social support to junior doctors in rural hospitals and can be a way to reduce their isolation. As such, it can influence students' conceptions of working in a rural hospital and of a career in such settings. The study suggested, among others, using videoconferencing and Yahoo groups for improving networking opportunities in rural areas.¹⁵ Rural Seeds aims to provide additional networking opportunities for those currently, or who are considering, working in rural settings.

Rural health cannot be discovered by chance - case studies

A way of raising awareness about rural health care is through having people talk about their own experiences. Networks of students and young doctors, such as Rural Seeds, offer opportunities to share experiences and acquire knowledge about rural health care. Examples of some experiences are as follows:

"I discovered rural medicine by chance in college when I participated in the Rondon Project which is a social integration project that involves the voluntary participation of university students in the search for solutions that contribute to the sustainable development of poor communities and to improve the wellbeing of the population.

At the end of my first year of college I went to Piaui, a city of 5,000 inhabitants. I was born and grew up in the capital of this state and for the first time I was going to a city so small and distant from the large urban centres. When I arrived in that remote city, I realised there was no doctor there and I saw that access to health for those who live in rural [areas] is very different from the level of access in the capital city.

This experience changed my view and my training. Getting to know the countryside aroused a love that could only have been awakened by experience."

- Karine Puls, Brazil

“When I was in the 4th year of medical school I heard about the necessity of providing specialised training in rural settings; that there were some skills and competencies particular to a rural GP, and that it actually happened in many parts of the world, such as Australia. The way I spent the rest of my medical training changed.

Much of my reality of the community was restricted to an urban area training and there were no available textbooks in the university library about rural medical education. The findings about rural perspectives came by chance and not by choice. Even after being exposed to the lack of access to health[care] people from the countryside have to deal with, the real insight only came after the direct advocacy of Mayara who came to my university to talk about rural health. At that time she was a student who was doing her rural internship but with a great background about rural. Since then, I joined the cause and started to advocate for rural health also.

In the situation of curriculum without any rural focus, Rural Seeds’ network is an illustrative example on how a useful tool, built by people, can be a powerful mind- and life-changing force.”

- Andressa Paz e Silva, Brazil

“I have discovered rural health by chance when I was medical student and went to Ireland under the Brazilian programme ‘Science Without Borders’ in 2014. I had the opportunity to do an observership in an island in Connemara region following a rural family doctor. After my observership, I went to a World Rural Conference in Croatia and networked informally to discuss about it.

When I came back to Brazil I was feeling isolated because I could not find any peers in my university to talk about rural health. In 2015 came the idea of the Rural Family Medicine Café that unfolded later into Rural Seeds.”

- Mayara Floss, Brazil

“I have been aware of rural health care through most of my training as I spent my childhood in a rural area. During my training in Croatia we were all aware of the need for medical professionals in rural areas and on many of the Croatian islands. However, we did not receive any particular training for rural medicine, nor was there a rural medicine training pathway.

I participated in the Wonca Rural Medicine Conference in Dubrovnik and helped to organise a student and young doctor programme for the event. Through this I met many inspiring rural practitioners and began to gain a better understanding of rural medicine and the different challenges associated with it.

During my family medicine training I was sent to a rural village due to a shortage of doctors in the area. This was my first real encounter with rural medicine. I was faced with a population that required a lot of care and had few resources to provide that care. This quickly resulted in my first experience of burnout. These factors contributed to my decision to move to the UK to continue my training. I believe that more needs to be done to promote rural medicine and empower rural health professionals and I hope that we can do this with Rural Seeds.”

- Veronika Rasic, Croatia/UK

“I grew up in what I would call a remote setting on Virgin Gorda in the British Virgin Islands. My view of health care was shaped by the fact that there was only one clinic with two doctors and a handful of nurses on the island and the nearest hospital was a boat ride away.

When I left the Virgin Islands to study medicine I knew that a modern medical curriculum would not equip me with the skills I needed to function at home. After starting my medical training at Swansea University, I joined the Rural and Remote Health in Medical Education track and met a number of rural health care professionals locally. I was also encouraged to join the Wonca Working Party on Rural Practice and this put me in contact with health care professionals around the world who were passionate about rural medicine. Eventually I joined the first Rural Family Medicine Café and then Rural Seeds.”

- Amber Wheatley, British Virgin Islands/UK

Rural health will not be sustainable if it is a career that is only discovered by chance. Rural Seeds is one way of inspiring interest in rural health through an international network – providing opportunities for identifying similar challenges in different parts of the world, and to consider possible solutions.

Rural Seeds: Opportunities, projects and actions

As a young network full of creativity and ideas, Rural Seeds is still developing and working out how best to manage itself and embark on projects. Some of the activities will be presented here.



Figure 1. Rural Seeds timeline

Call to Action: ‘Health for all rural people around the world’

The Call to Action was created in consultation with students, young doctor organisations and individuals present at the Wonca 14th World Rural Health Conference (14WRHC) held from 29 April to 2 May 2017 in Cairns, Australia.¹ It aims to give a voice to rural health professionals in training and to set integrative and supportive goals for the rural health sphere, based on the cumulative experiences of organisations and individuals. Three main areas were identified for action:

- Education and training
- Co-empowerment
- Communication.

Details of these – taken directly from the Call for Action – are as follows.¹

Box 2. Call to Action

Education and Training

- 'Promote rural health career options at both undergraduate and postgraduate levels.
- Support student endeavors to include or increase the content or quality of rural health in their local medical curricula.
- Empower local communities to contribute to the development of sustainable rural health care practices for their region and support translation of these approaches into the local medical curriculum and reality.
- Establish or expand new rural placement opportunities, ensuring adequate modelling from well-established rural health programmes wherever applicable
- Encourage and facilitate culturally-aware education structures as part of the rural health curriculum and ensure adequate preparation has been provided prior to placement in a community with differing cultural attitudes than one's own.
- Increase the attendance of rural health professionals in training to World Rural Health Conferences through careful consideration and mitigation of associated costs and other barriers to accessibility.'

Co-empowerment

- 'Continue the development of *Rural Seeds*, *Rural Family Medicine Café*, *Rural Health Success Stories*, and other international organisations and platforms that support the needs and practices of rural health professionals in training.
- Develop a toolkit for local rural health projects to ensure that they are better connected with international networks.
- Promote the advocacy and lobbying efforts of other rural health professionals in training with regards to rural health education, training and practices.
- Collaborate with interdisciplinary rural health professionals in training on issues of common interest.
- Ensure equal opportunities exist in rural health irrespective of gender, ethnicity, religion, sexuality or disability.
- Support the development of national rural placement guides for young professionals who are due to commence a new rural placement.
- Build quality relationships with local communities for reciprocal learning.
- Seek out and utilise community role models to promote rural health needs and as a career choice.'

Communication

- ‘Improve the utilisation and proficiency of social media as a tool for empowerment and engagement in rural health.
- Increase the sharing of art, stories, songs, poems, narrative-based medicine and other creative endeavours for the benefit of both rural health professionals in training and rural patients.
- Ensure that adequate face-to-face connections are maintained wherever possible.
- Survey members on their preferred methods of communicating, sharing and connecting and adapt communication methods accordingly.’

The Call continues:

‘In addition to the call to rural health professionals in training above, we also call on governments and universities to support the endeavours outlined and to action the following plan:

- establish and expand supported and integrative rural health training networks across undergraduate and postgraduate levels; and
- increase consultation opportunities with rural health professionals in training and facilitate the translation of their ideas and needs into the provision of rural health practice.’

The aim is to review the Call to Action every two years to ensure adequate progress is being made. This will include refining proposed targets, noting any shortfalls and achievements and using these to improve the ways of meeting the objectives.

Rural Seeds Projects

As the time of writing, Rural Seeds has four ***active projects***:

- Rural Family Medicine Café
- Rural Videos
- Rural Health Success Stories
- Mentor-Mentee Programme.

It also has two ***discontinued projects***:

- Rural Wiki
- Rural Advisor.

Finally it has one ***upcoming project***, the pilot ‘Spreading Rural Seeds’.

Active projects

- **Rural Family Medicine Café**

The Rural Family Medicine Café is a live, and lively, monthly forum focussing on rural family medicine and involving health care practitioners and students from all around the world. It aims to address issues that are common in rural settings, including support and engagement of rural health care professionals.

Organising a café involves choosing an appropriate topic, deciding on the date and time of the café, publishing and promoting it on social media and inviting participants. It also includes co-ordinating comments on Facebook and Twitter and posting the video of the discussion after the café.

As at October 2018, the project had held 36 sessions with participants from all continents.

Manual: 'How to do a Rural Café?'

The Rural Family Medicine Café has grown into a virtual community and an informal learning environment with international participation. While the cafés aim to overcome geographical and professional isolation using social media, issues such as internet access became apparent. As a result, a manual on how to run rural cafés locally was designed¹⁶ giving step-by-step instructions, including the equipment needed and how to utilise social media. This allows professionals in rural areas to connect with each other in their own language and time zone and discuss issues pertinent to them.

- **Rural Videos**

The aim of the rural videos project is to explore some topics relating to rural health, specifically for undergraduate medical students and newly qualified health care professionals.

With the financial support of the Brazilian Society of Family Medicine and in conjunction with the Brazilian Working Group for Rural Health, a Brazilian group within Rural Seeds was able to obtain the software and tools needed to produce short videos which have also been used to educate the general population on specific topics in rural health. The videos are:

- 'Do you know what rural health is?' (English and Portuguese)
- 'Why rural health is different from urban health'
- 'Planetary health: what is this?'
- 'Rural Seeds'
- 'Mentor-Mentee Programme'.

The Rural Seeds video network was also used to produce 'Francesa Alta', a documentary about pesticides (directed by Dr Paola Veiga) and 'Ruralices' which is a poetic perspective on the work of rural young doctors, with images from Dr Mayara Floss and text from Dr Amber Wheatley.

'Francesa Alta', 'Do you know what rural health is?', 'Planetary health: what is this?', 'Ruralices' and 'Why rural health is different from urban health' were selected for the International Short Film and Arts Festival at the 15th Wonca World Rural Health Conference held in New Delhi. The last two were awarded for the best soundtrack and best animation respectively.

- **Rural Health Success Stories**

Rural Health Success Stories is a collection of creative writing pieces, written by rural health care professionals and students interested in rural medicine, with the aim of engaging and inspiring rural health care professionals. Even though 'success' is included in the name, the project shares stories which address all aspects of working in rural areas.

A product of a partnership between Wonca Rural South Asia (WoRSA) and Rural Seeds, each piece is published on the Rural Health Success Stories blog (<http://ruralhealthsuccess.blogspot.com.br/>). The goal of this project is to produce a book with images and rural stories from all around the world.

- **Mentor-Mentee Programme**

The Mentor-Mentee Programme was established in 2017, following discussions at the World Rural Health Conference on methods for reducing isolation of rural health professionals. It aims to connect rural medical professionals in training with more experienced colleagues, to help them achieve their potential in rural health care – with a view to reducing isolation and to creating more equitable access to training opportunities around the world. (For further information, please refer to the chapter in this Rural Medical Education Guidebook on 'Mentor-Mentee Programme: Mentoring in areas without established rural training pathways'.)

Discontinued projects

Although Rural Seeds is run entirely by a small group of highly motivated volunteers, one of the challenges with implementing projects has been maintaining consistent involvement given competing personal commitments, including university or medical practice. As a result, some projects could not be sustained and have been left incomplete. Two of these are RuralWiki and Rural Advisor.

- **RuralWiki**

The aim of this project was to collate information specific to rural medicine, providing a user-friendly point of reference. The idea was to create a specific place for rural information in a way that allowed people all over the world to contribute to themes (like a Wikipedia). This did not develop, however, given a lack of funds and access to the expertise needed to design such a platform.

- **Rural Advisor**

This project was inspired by the travel review site TripAdvisor which provides information and reviews on activities, restaurants etc. by users of the site.

Rural Advisor would have facilitated easier access to information on rural short-term work experience opportunities (internships) around the world as well as comments and evaluations on the experiences by 'users'. The central idea was to connect locals, universities and rural professionals who are offering internships in rural areas with people interested in undertaking these internships. It would have focused on undergraduate medical students but could have included postgraduates. It would also have indicated whether or not internships were 'certified by an official organisation'.

Rural Advisor was to be a website/app accessible only to people or institutions who had registered as users. This project stalled because of the lack of funds to develop such a website or app and the lack of support to maintain such a project.

Upcoming project

- **Spreading Rural Seeds - Pilot**

Rural health is a neglected topic in medical school curricula around the world. A huge number of health care professionals complete their training without being exposed to, informed about or prepared for the reality of rural health care.

In Brazil this situation caught the attention of some students and inspired the creation of 'Spreading Rural Seeds' which aims to encourage medical student exposure to rural health via student groups such as academic leagues. Members of Rural Seeds conducted presentations on rural health activities and experiences in rural health, and also invited students to join Rural Seeds. A pilot meeting was held in Passo Fundo, Brazil, in three academic leagues.

As a result of involvement with Rural Seeds, two medical students in Brazil are in the process of creating four-week rural work experiences at the Universidade Federal de Uberlândia. The main constraint with incorporating rural health into the curricula has been the financial support needed to hire additional preceptors. Despite challenges with the preceptors and infrastructure, a positive experience has been reported.

Scientific production and research

Since the inception of Rural Seeds in 2015 at the 13th Wonca World Rural Health Conference in Dubrovnik, its members have given a number of conference presentations regarding rural health for young health professionals in training, focusing on scientific research and projects for family doctors. Examples are as follows:

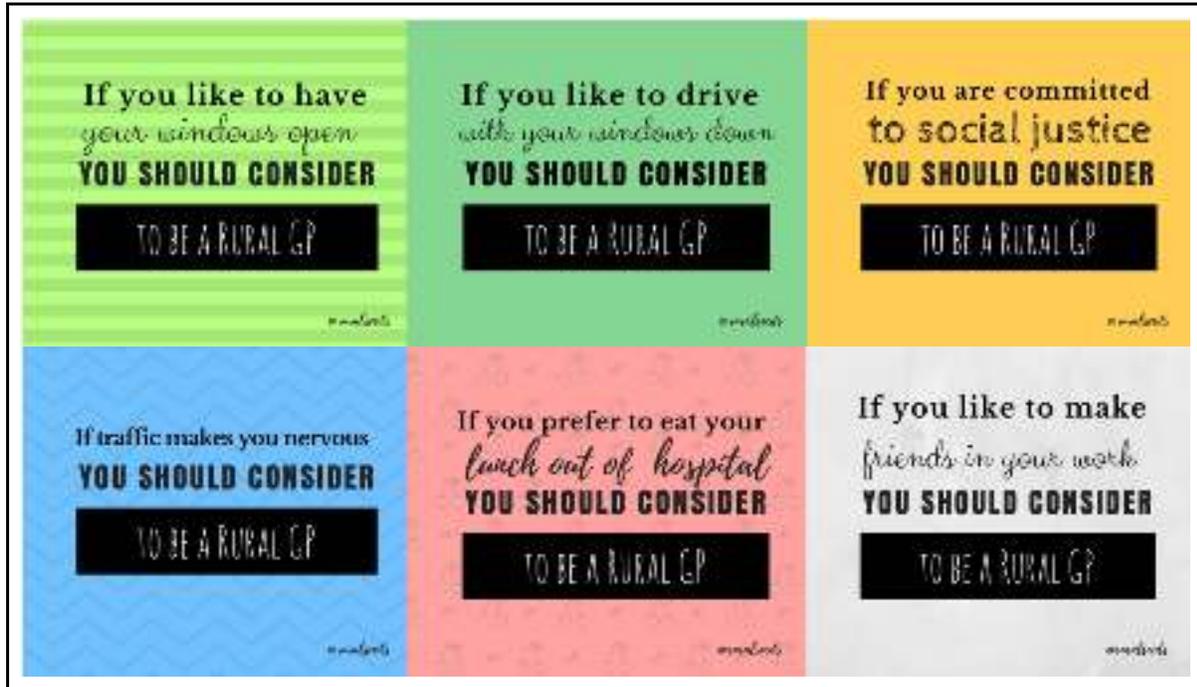
- The first Conference Rural Cafés with live transmissions took place in 2016 at the 21st Wonca World Conference. Since then, Rural Cafés have been transmitted from all the other World Wonca Conferences, as well as from the 4th WHO Global Forum for Human Resources in Health, Dublin, Ireland in 2017.
- A key presentation on 'Rural Stories, Leadership and Co-empowerment' was included in the 14th Wonca World Rural Health Conference, Cairns, Australia in 2017.¹⁷
- One of the Rural Seeds ambassadors participated in the Investing in Rural Women and Girls event at the 62nd session of the Commission on the Status of Women, WHO in New York, USA.¹⁸
- Rural Seeds members have been actively involved in organising workshops such as 'How to produce Rural videos', 'Rural Doctors in training around the world', 'Rural internships/electives', 'Mentoring in rural areas' and 'Social media and rural health'.
- They have also engaged in oral communications presenting the network and its projects and have participated in many discussions and panels. For example they participated in panels and meetings of the Wonca Young Doctor's Movement.
- The work of two Rural Seeds members was recognised at the 15th Wonca World Rural Health Conference, New Delhi, India, 2018 : 'Rural health and medical education: The view of a medical student' and 'Rural Seeds: Innovating the rural health care'.
- Rural Seeds members also participate in local conferences.

Social media

Rural Seeds is active on several social media platforms including Facebook, Twitter and YouTube.

The Rural Seeds **Facebook** page was created to be an informative and visually attractive channel to raise awareness of rural health issues (see Figures 2a and b). This included promoting Rural Seeds projects and rural health conferences around the world. The Rural Seeds Facebook has had over 4,900 interactions to date and gained about 400 followers between 2017 and 2018. Interactions on the Facebook page are done primarily through various posts.

**Figure 2a. Social Media marketing:
Campaign ‘You Should Consider to be a Rural GP’**



**Figure 2b. Social Media marketing:
Quotes and examples of social media campaign**



On the other hand, interaction on the Rural Seeds **Twitter** page takes place mainly during the monthly Rural Café meetings through the handle ‘#RuralCafe’. To date, there have been 144 posts on the Twitter page with the highest interaction coming from the promotion of the animated video ‘Do you know what rural health is?’ in both English and Portuguese.

The structure of Rural Seeds

Rural Seeds has a horizontal structure to ensure that all members have an equal voice.

It is organised around its projects, each being co-ordinated by one to three Project Leads who are, in turn, co-ordinated by a Rural Seeds Ambassador. Ambassadors help Project Leads to develop and implement their projects – and also act as representatives for Rural Seeds members at professional events.

Additionally, Rural Seeds has a Young Doctors Movement (YDM) Liaison, a Social Media Co-ordinator and a secretary.

The functions of each role are as follows:

- The **Rural Seeds Ambassador** promotes rural health and its continuing development and helps inform and guide members of Rural Seeds. They are also expected to be advocates for the health of rural communities and rural health care workers and encourage engagement and collaboration across different health sectors. The primary function of the Ambassador is to work closely with the Project Leads to develop and promote projects and activities. They also represent Rural Seeds at conferences, events and congresses.
- The **Rural Seeds Project Leads** must choose appropriate topics for projects and activities and organise them accordingly. They are expected to report activities to the Ambassador and assist in the promotion of projects and activities on social media.
- The **Young Doctors Movement (YDM) Liaison** involves the various YDMs within Wonca in Rural Seeds activities. They are responsible for relaying information on Rural Seeds projects and activities to the Wonca YDM Lead with a view to facilitating collaboration and sharing of information.

Practice pearls

- **Register participation:** In order to participate and stay up-to-date, people are encouraged to sign up to the Rural Seeds network via a registration form (<http://bit.ly/RuralSeedsForm>). By doing so, Rural Seeds members join a mailing list where project and activity information is shared.
- **Collaborate in projects via networking:** Having a variety of projects allows Rural Seeds members to explore their strengths and join in projects that suit their availability. This ranges from the monthly commitment of co-ordinating a Rural Café to ad hoc involvement like publishing a rural health story. Rural Seeds encourages its members to network horizontally and interact with each other to develop opportunities for both undergraduate students and newly qualified doctors.
- **Empower members:** Rural Seeds members are encouraged to spread ‘rural seeds’ and empower governance bodies to develop projects locally – including rural cafés, student clubs and research – given that not all bodies of governance are geared towards equity in health and towards the importance of rural health care.
- **Financial support:** While there is plenty of energy, innovation and enthusiasm from students and young doctors interested in rural work, a lack of funding for projects and for attending international conferences is a perennial issue. Members are encouraged to use the Rural Seeds networks for advice on funding. Rural Seeds also advocates for reduced conference fees for students and young doctors working in rural areas.

- **Recognise the achievements of the network:** As part of empowering and encouraging members, Rural Seeds highlights the achievements of its members who face social and occupational isolation and work in difficult circumstances. Achievements are recognised and circulated by members over social media. These include hosting rural themed conferences, publishing research, initiating projects for improvement of rural health care and work in rural health advocacy.
- **Advocacy:** A central part of Rural Seeds is advocating for health equality for rural populations and for improved working conditions for rural health care professionals. Rural Seeds also assists with advocating for medical students working towards incorporating rural medicine into their academic curricula. While universities and other professional bodies are not always supportive of students developing a career in rural health, Rural Seeds aims to provide a network for advice and support for students wishing to do so.

Challenges and opportunities in the future: Growing the seeds

In writing this chapter, it has been interesting to reflect on how many people have discovered rural health by chance. This raises the question of how many health professionals around the world have not considered a career in rural medicine simply because they had not experienced it. This can be likened to seeds lost in infertile land.

Rural Seeds has developed into a network with a strong public profile and multiple projects – the intention being that this will raise the profile of rural health, making it a more visible and viable option for health professionals. By creating a community through its projects, it also intends to reduce the isolation of rural practitioners, thus supporting their continuing in this work.

Besides sowing seeds, it is important to provide opportunities for those seeds to grow. This can be achieved by collaboration with other rural health initiatives around the world to facilitate the development of innovative and sustainable rural health practices. Strategies to achieve this have been outlined in the Call to Action described in Box 2 above.

Despite many of the positive outcomes outlined in this chapter, Rural Seeds is still challenged with finding more effective methods of encouraging members to actively engage in existing projects and to develop projects of their own. One way to address this would be to develop a guide on fundraising and how to engage financial administrative personnel, since many projects require financial planning and support.

Rural Seeds is interested in supporting local organisations and individuals advocating for rural communities to achieve better visibility and bring about changes in rural health. It will continue to be an open and innovative network that welcomes a diverse range of experiences and opinions in the spirit of attaining health care for all and making rural practice an attractive career option for all health care professionals.

References

1. Rural Seeds (2017) *Cairns Call to Action – ‘Health for all rural people around the world’*. 14th World Rural Health Conference. Cairns. Available at: <https://www.wonca.net/site/DefaultSite/filesystem/documents/Groups/Rural%20Practice/17%20Cairns%20call%20to%20action.pdf>
2. United Nations. (2018) *#Envision2030: 17 goals to transform the world for persons with disabilities | United Nations Enable*. [online] Available at: <https://www.un.org/development/desa/disabilities/envision2030.html> [Accessed 15 Dec. 2018].
3. Gusso G& Lopes JMC.(2018) *Tratado de Medicina de Família e Comunidade*, Porto Alegre, Artmed.
4. Savassi LCM, Almeida MMD, Floss M& Lima MC. (2018) *Saúde no Caminho da Roça*, Rio de Janeiro, Editora Fiocruz.
5. Hubinette M, Dobson S, Scott I and Sherbino J. (2016) Health advocacy. *Medical Teacher*, 39(2): 128-135.
6. Farrer L, Marinetti C, Cavaco Y and Costongs C. (2015) Advocacy for Health Equity: A Synthesis Review. *Milbank Quarterly*, 93(2): 392-437.
7. WHO(2010) *Increasing access to health workers in remote and rural areas through improved retention*. Geneva. Available at <http://apps.who.int/iris/bitstream/10665/44369/1/9789241564014_eng.pdf>
8. Carson DB, Schoo A& Berggren P. (2015)The ‘rural pipeline’ and retention of rural health professionals in Europe's northern peripheries. *Health Policy*, 119(12):1550-1556.
9. Wenghofer EF, Hogenbirk JC, and Timony PE. (2017)Impact of the rural pipeline in medical education: practice locations of recently graduated family physicians in Ontario. *Human Resources for Health*, 15(1):1-6. doi:10.1186/s12960-017-0191-6
10. Kwan M, Kondalsamy-Chennakesavan S, Ranmuthugala G, Toombs MR & Nicholson GC. (2017)The rural pipeline to longer-term rural practice: General practitioners and specialists. *PloS One*, 12(7): 1-15. doi:10.1371/journal.pone.0180394
11. Rourke J, Asghari S, Hurley O, Ravalia M, Jong M, Parsons W, Duggan N, Stringer K, O'Keefe D, Moffatt S, Graham W, Sturge Sparkes C, Hippe J, Harris Walsh K, McKay D, Samarasena A. (2018)From pipelines to pathways: The Memorial experience in educating doctors for rural generalist practice. *Rural and Remote Health*, 18(1). <https://doi.org/10.22605/RRH4427>
12. Vick B. (2015) Analyzing rural versus urban differences in career dissatisfaction and plans to leave among Pennsylvanian physicians. *The Journal of Rural Health*, 32(2).
13. Rana SA, Sarfraz M, Kamran I, Jadoon H. (2016) Preferences of doctors for working in rural Islamabad capital territory, Pakistan: A qualitative study. *Journal of Ayub Medical College Abbottabad*, 28(3):591-596.
14. Arscott-Mills T, Kebaabetswe P, Tawana G, Mbuka D. O, Makgabana-Dintwa O, Sebina K, Kebaetse M, Mokgathe L, Nkomazana O. (2016)Rural exposure during medical education and student preference for future practice location - a case of Botswana. *African Journal of Primary Health Care & Family Medicine*, 8(1):1-6. doi:10.4102/phcfm.v8i1.1039

15. Vyas R, Zachariah A, Swamidasan I, Doris P, Harris I. (2012) A Networking approach to reduce academic and social isolation for junior doctors working in rural hospitals in India. *Education for Health*, 25(1):70-74.
16. Floss M. (2016) *How to do a Rural Café*. 1st ed. Wonca's Working Party on Rural Practice, pp.1-14. Available at <https://www.wonca.net/site/DefaultSite/filesystem/documents/Groups/Rural%20Practice/Manual%20Rural%20Cafe.pdf>
17. Floss M. (2017) *Rural Stories, Leadership and Co-empowerment. (lecture)* Available at <http://bit.ly/RuralStoriesandEmpowerment>
18. Floss, M. (2017) Investing in rural women and girl. In WHO (Ed.) *Sixty-second session of the Commission on the Status of Women*. New York, UN. Available at <http://webtv.un.org/watch/player/5750640890001>

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