Rural and Remote Health rrh.org.au
James Cook University ISSN 1445-6354

ORIGINAL RESEARCH

Qualitative study of barriers and facilitators of health entrepreneurship in rural and semirural communities of Armenia

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PUBLISHED

18 January 2022 Volume 22 Issue 1

HISTORY

RECEIVED: 6 February 2021

REVISED: 14 October 2021

ACCEPTED: 27 October 2021

CITATION

Atanyan A, Markosyan K, Demirchyan A, Lylozian H, Giloyan A, Kocharyan L, Harutyunyan T. Qualitative study of barriers and facilitators of health entrepreneurship in rural and semirural communities of Armenia. Rural and Remote Health 2022; 22: 6645. https://doi.org/10.22605/RRH6645

ABSTRACT:

Introduction: Low- and middle-income countries often face the issue of unequal distribution of healthcare services and human resources between rural and urban areas. Globally, there are many factors negatively affecting the willingness of physicians to work in remote and rural areas, such as low wages, poor living conditions, poorer and sicker patients, suboptimal equipment and supplies, and a lack of quality infrastructure and transportation.
Methods: This study explored the perceptions of barriers and facilitators of medical entrepreneurship and the impact of medical entrepreneurship on the served communities among the owners of private medical practices in rural and semirural areas of Armenia. The researchers conducted qualitative in-depth interviews with the 13 owners of 12 private practices. The interviews were transcribed in the original language (Armenian). Only the quotes were translated into English. The direct content analysis approach was used for analyzing textual data.
Results: The findings of the study suggest that high investment cost, intense competition with state facilities, unfavorable laws and regulations, and a lack of entrepreneurship and healthcare quality assurance skills were perceived as barriers to establishing and running private healthcare practices. The dissatisfaction of healthcare providers with their work conditions in state facilities, the instability of the job market in Armenia, and the development of clear marketing strategies by the entrepreneurs facilitated opening and operating private practices. All of the interviewees felt that their practices had a positive impact on the communities they served, in terms of creating new jobs and introducing up-to-date and in-demand services into these communities.
Conclusion: The study recommended providing potential entrepreneurs with training in entrepreneurship and healthcare quality assurance and mentorship opportunities, as well as with tools to support financing their enterprises.

Keywords:

Armenia, barriers, entrepreneurship, facilitators, health, qualitative.

FULL ARTICLE:

Introduction

The private sector is a significant factor in health care in many low- and middle-income countries (LMICs)[1,2]. It includes all for-profit and not-for-profit providers outside the public sector involved in treating or preventing disease[3]. Although the engagement of the private health sector raises many controversies, including ideological debates[2], there is a growing recognition of the need for governments and donors to actively use the private sector to address the issues of poor accessibility of services, unavailability and mal-distribution of staff, and the scarcity of drugs and supplies in LMICs[1,4]. Furthermore, patients frequently prefer private healthcare providers because of better geographical accessibility, shorter waiting times, extended working hours, more sensitive provider–patient attitudes, and greater confidentiality when treating socially stigmatizing diseases[1,5].

Many LMICs face the issue of unequal distribution of healthcare services and human resources in rural and urban areas[6]. Globally, many factors negatively affect the willingness of physicians to serve in rural and remote areas[7,8], such as poor living conditions, low wages, and lack of schooling for children[8]. Other known barriers to serving in remote areas include the rising cost of medical education, poorer and sicker patients, lack of appropriate equipment and supplies at many rural clinics, and a lack of quality infrastructure and transportation[9]. To address the many factors negatively affecting the willingness of physicians to serve in rural and remote areas[7,10], and to increase access to health care there, several retention strategies have been used in different countries, including regulatory and education interventions, support in management, monetary compensation and others[10].

Armenia is a landlocked country in the south Caucasus. Armenia was classified by the World Bank as an upper-middle-income country with an estimated per capita gross domestic product of US$4230 in 2018[11]. Armenia's healthcare system was severely affected by the collapse of the Soviet Union and the ensuing economic crisis, leading to declines in healthcare access, quality, and outcomes[12-14]. Before the breakdown of the Soviet Union, the Semashko model of care was used in Armenia, which aimed to provide universal and free access to a full range of primary, secondary and tertiary healthcare services[15]. The period of destabilization has been followed by substantive health system reforms, including decentralizing service provision to regional and local governments; defining the Basic Benefits Package, which includes the list of medical services covered by the Armenian Government as well as the population groups entitled to those services; separation of purchasing and provider functions through the creation of the State Health Agency tasked with purchasing healthcare services through public funds provided by the Armenian Government; and the privatization of services[16,17].

The healthcare system in Armenia is organized at national, regional and community administrative levels[16]. The key policy-maker and regulator of the healthcare system is the Ministry of Health[16]. The Armenian healthcare system today represents a mix of stat- owned and private facilities that provide paid services and services covered by the Basic Benefit Package (financed by the government)[16]. All health facilities, independent of their legal status, can have a contract with the Ministry of Health to provide services included in the Basic Benefit Package. About 58% of healthcare facilities in the capital Yerevan and 13% of healthcare facilities in the regions are private[18]. Health care in Armenia is mainly financed through out-of-pocket payments (85% of total health expenditure), state budget and voluntary health insurance[19,20]. All citizens in Armenia have access to primary healthcare services, obstetric services, pediatric services, emergency services and care for special diseases including tuberculosis and HIV/AIDS. Some groups of vulnerable populations have access to additional hospital-based services[19,21].

While the overall number of healthcare professionals exceeds the required number, they are not distributed evenly throughout Armenia: primary healthcare services in rural areas are lacking the needed workforce[17,22,23]. This mal-distribution leads to decreased accessibility to care in rural settings as well as increased burden on adjacent urban facilities[12,24].

Several strategies have been reported to increase access to health services[3,7,8]. The promotion of private medical entrepreneurship in rural areas is one of these interventions. In general,

entrepreneurship is defined as 'the pursuit of opportunity beyond resources controlled'[25], and combines efforts in exploring, identifying and implementing opportunities in certain fields, concentrating on bringing innovations[26,27]. Entrepreneurship in health care is frequently oriented towards problem solving and design thinking, targeting improvement of clinical practices and health outcomes[26].

Since 2006, the Turpanjian Rural Development Program (TRDP) at the American University of Armenia has been supporting rural entrepreneurs from various fields by providing beneficiaries with knowledge and skills as well as low-interest loans to successfully establish and operate their private services. The adaptation of the TRDP program to the health sector was initiated in 2015 to increase access to and the quality of health services in rural and remote areas of Armenia.

This work aimed at exploring the barriers and facilitators of opening and successfully operating private healthcare practices in rural and semirural areas of Armenia and the perceived impact of the practices on the served communities.

Methods

The study was implemented by the Avedisian Onanian Center for Health Services Research and Development at the American University of Armenia, between January and June of 2015. The study used a qualitative cross-sectional design via in-depth interviews (IDIs) with the owners of health practices operating in rural or semirural regions of Tavush, Shirak, Gegharkunik, and Kotayk provinces of Armenia. The participants were recruited through purposive and snowball sampling from the list of private health practices provided by the Ministry of Health of Armenia.

The data were collected using a semistructured interview guide for IDIs, which included three sections. The first section explored issues related to opening private practices: participants' skills, educational background, special training, and personal features key to the success in implementing their ideas; any preliminary needs assessment/market research conducted; business and financial plans; fundraising and loans; and the process of obtaining licenses and registering the practices. The second section explored the operation of the practices and included questions on the initial investment and return of investment; availability of documents regulating the operation of private practices; competition, products and services; facilities, equipment and supplies; customer relations; existing and recommended quality supervision; marketing strategy; and personnel relations, including the additional question of whether the participant felt a need for training in the area of entrepreneurship. The third section explored the perceived impact of private practices on the communities served, and solicited the recommendations of respondents to potential health entrepreneurs in rural areas. Additionally, all study participants completed a short questionnaire about their demographic characteristics and selected features of their practices, including the source of funding, the year of establishment, number of rooms and staff members, provided services, and patient flow.

Overall, three interviewers conducted 13 IDIs. Interviews took place mainly in the private practice settings, after working hours or during break periods. The break periods gave an opportunity to make observations in addition to collecting verbal data. All the interviewers were public health specialists skilled in qualitative research methods with no personal interest or involvement in private health practices.

All IDIs were transcribed in the Armenian language. The direct content analysis approach was used for analyzing textual data. The main codes were identified through the repeated review of data and combined into categories with the relevant subcategories. Descriptive data from the short demographic and practice-related questionnaire were summarized in an Excel worksheet.

Ethics approval

The study protocol was approved by the Institutional Review Board of the American University of Armenia (approval #AUA-2015-009). The IDIs were conducted face to face in a private location, after the key informant (KI) had verbally consented to be interviewed. Most of the IDIs were audio-recorded with the consent of participants. Written notes only were taken from those interviewees who refused to be audio-recorded (three respondents).

Results

Overall, 13 IDIs were conducted with owners of 12 private practices: one of the facilities was run by a pair of entrepreneurs, both of whom were interviewed. The private medical practices included four family medicine practices, three multifunctional diagnostic centers, two ultrasound diagnostic units, one pediatric unit, one dental practice, and one pharmacy. One of the practices was operating in a rural area (dental practice); the remaining 11 were operating in semirural areas. The mean number of rooms in the practices was 4.7 (range 2–8); the mean number of staff was 4.9 (range 2–10). The owners of practices reported serving between 10 and 1000 customers a month.

The mean age of the interviewees was 42.6 years (range 27–57 years). Five of them were male and eight were female. The average time since practice establishment was 2.8 years (range 2–5 years). The interviewees worked in their field for an average of 19 years (range 7–33 years). The average duration of IDIs was 87 minutes (range 60–135 minutes).

Challenges to establishing/running private practices

Imbalance between the investment cost and profitability: One of the main barriers to establishing and running private practices mentioned by most respondents was the high investment cost along with the inability to get a return on their investment in a reasonable period of time. None of the interviewees was able to return their investments by the time of the interview. Considering the income level of the local population, the private practices tried to maintain low prices for services by decreasing the operating costs of the practices.

> *We invested a lot into this practice (around US$50,000) and we continue to invest because we are expanding it. We are leasing most of the equipment and we are paying a considerable amount of rent for the facility … Since we could not set high prices for our services (a big proportion of our target population is poor), the only way to increase our profit is to save on our expenditures. That is why we don't hire more people. (KI 5)*

The respondents thought that the risk of bankruptcy for medical practices in rural communities is high and that to avoid it one either has to have 'extra money' (which is not common among rural healthcare professionals) or get a grant. Six respondents (including all four family medicine clinic owners) said that they would not dare to open a private practice in rural regions without receiving low-interest loans or grants from different supporting organizations. The organizations they mentioned included TRDP and the Healthcare System Strengthening in Armenia project conducted by the US Agency for International Development in 2012. The remaining six practices either used their families' savings or took high-interest loans . Some of those who received considerable support from donor organizations or used personal funds to establish practices said that making a profit was not their primary goal; rather, they wanted to make a difference in their own communities.

The private family medicine clinics were in favorable conditions due to receiving state funding for providing primary healthcare services. Other private practice owners also expressed interest in providing services covered by the government; however, they did not know how to get involved.

> *My primary goal when I established the practice was not obtaining big profits, because I knew it was not realistic. All funds coming from SHA [State Health Agency] are already allocated to cover specific activities and materials. I cannot re-allocate them to obtain big profits. The only profit comes from paid services provided to non-registered patients. It is really small, yet in two years, it helped me to return 70% of my own investment in the renovation of the facility. (KI 2)*

The majority of respondents thought that loans were not a good source of funds because there was a risk of failing to repay them. The respondents were also unhappy with the conditions of loans, such as high interest rates and short terms.

> *I would not recommend others to get loans, because the conditions for getting loans are usually not good – the interest rate is too high, the timeframe for returning the loan is very short for those businesses which do not provide a quick return of investment. (KI 10)*

Competition: Many participants stated that they have had conflicts with other state or private health facilities and have competed with them for customers. As opposed to 'healthy competition' with other local private facilities, the competition with the local state facilities was perceived as unfair because of the power imbalance. The opposition of state-owned polyclinics to the establishment of private family medicine practices was particularly strong.

> *At the beginning, when I had just decided to open the practice, my colleagues from the state facility were creating barriers for me. They were visiting my potential patients and discouraging them to get enrolled in my practice. They were disseminating misinformation stating that I am a fraudster and I will deceive the patients, that there can be no free-of-charge services in a private practice and that the patients will have to pay for everything. But when, in spite of all of these barriers, I established the practice, they accepted it as a reality and have not interfered with my work anymore. (KI 7)*

Other types of practices also faced some competition with local state facilities, particularly at the beginning. However, it was not as strong as for the family medicine practices. In addition, the interviewees mentioned competition with similar facilities and professionals in Yerevan and other big cities because, in their opinion, rural people are traditionally more inclined to trust professionals from big cities. Factors such as lower prices or free services, higher quality, innovative approaches and uniqueness of services, convenience and accessibility, as well as compassionate personnel helped to attain competitive advantage.

> *I think that features like quality, flexible prices, and positive attitude toward people make our services competitive. (KI 3)*

> *Innovation and affordable prices are the keys to winning the competition with Yerevan [the capital city] practices. (KI 9)*

Existing policies and regulations: The policies that regulate the establishment and operation of private medical practices also introduced considerable barriers. According to the study participants, the establishment of their practices became possible only recently after internationally funded projects targeted the development and revision of corresponding policies and regulations and negotiated all licensing-related issues on behalf of private entrepreneurs. Despite this, some of the owners of private practices still faced challenges while obtaining licenses for their practices, because they were required to get out-of-date or unnecessary equipment and supplies or hire extra staff to meet the existing licensing requirements. The participants stressed that these requirements have not been updated for a long time.

> *Barriers exist. While currently multifunctional technologies are being introduced every day, the government-approved list of equipment required for licensing contains very old equipment items, which are very difficult to find … Another problem was that since our center has several departments, we were required to have a physician, a nurse, and a sanitary worker/cleaner for each department. But we don't need to have these many staff members … I think that the licensing regulations should be revised and updated, they should be more flexible. (KI 5)*

Tax regulations posed another challenge for private facility owners. One of the participants complained that the tax burden was very heavy. Others had problems with paying taxes because of frequent revisions of tax regulations and their own inability to keep up with the changes because of being overloaded with other tasks they had to attend to as practice owners:

> *The laws and regulations change and I am not able to follow them up. Once I had to pay penalties to tax agency for the incorrect submission of the financial report. (KI 2)*

Lack of entrepreneurship skills: The majority of respondents opened their practices without having a clear idea of how much they had to invest, what the demand for their services would be, and how long it would take to get a return on their investment and start making a profit. When asked about the importance of having entrepreneurship skills and participating in relevant training for the success of their practices, those respondents having a background in entrepreneurship-related fields or who had trained on these issues especially valued the experience of running a private business, managing human resources, financial issues and accounting, and participating in relevant training.

KI #8: I don't have any background in financial/accounting issues, neither have I ever attended training on these issues. Therefore, I am experiencing problems with these issues and asking my friends to help me with this. (KI 8)

Lack of knowledge in quality assurance: Another common problem that the study found was a lack of understanding of what quality assurance is and a lack of skills required to supervise the quality of health services. Most participants, particularly the family physicians and the pediatrician, thought that quality assurance is merely the supervision of their performance by a higher body to which they report, while the owners of diagnostic centers and the dentist understood the question as one about checking devices they were using.

I bought expensive devices and equipment in order to meet the needs of my clients. However, I am not a specialist in technology, nor can I hire a specialist who would regularly check up these devices and equipment. Therefore, I am concerned that at some point they will break which would cause a big financial loss. (KI 10)

The only pharmacist who was interviewed said that the most important is checking the expiry date of pharmaceuticals and keeping proper sanitary/hygienic conditions in the facility. When asked about how they supervise the work of their personnel, all respondents stated that the practices are small and they constantly see how the personnel work; therefore, they do not have any special procedures for supervision.

Facilitators of establishing private practices

Lack of satisfaction with previous workplace: The strongest driver for establishing a private practice was the lack of satisfaction with the work that the healthcare providers were conducting at their former workplaces (mainly state healthcare facilities). The reasons for dissatisfaction included an inability to realize professional aspirations, a lack of independence, an inability to carry out the job properly and set their own standards and rules (eg set flexible prices, provide discounts and free services), and a lack of modern equipment and good working conditions that would enable them to provide high-quality services and improve patient satisfaction.

When you have your own business, you don't have to follow the rules and standards set by someone else even if you don't agree with them, you are 'the master of yourself' and you set your own standards. (KI 3)

Unpredictability of Armenian job market: According to participants, another common reason for opening private practices was the unpredictability of the job market in Armenia, which made the respondents question the stability of their state-funded jobs.

I have a permanent job at the regional health center; however, there is no guarantee that they will keep me at this position for as long as I would like. (KI 6)

Development of clear marketing strategies: The development of clear marketing strategies and proper preparatory market research was believed to be an important prerequisite for a successful private practice. The owners of the two successful diagnostic centers said that they would not invest considerable funds into private practices without doing market research because they knew that the widely prevalent poverty in rural areas of Armenia made the failure very probable. Therefore, before opening the centers, they made sure they had a clear idea about the size of the population they would potentially serve, services the potential customers might need, the amount of fees they might pay for services, the competitors' strengths and weaknesses, and other aspects of their future work.

In the beginning, I tried to understand market demands, vulnerable areas and after that, I opened my practice. Honestly, at first, I had just a rough idea/general understanding of the demand, because I did not have time to conduct formal research. So I asked other people about issues which I wanted to clarify. There were times when I felt the need for training in conducting preparatory research for opening my practice. I also agree that there is a need for trainings in studying the market. I would like to develop my skills in that too. (KI 3)

Impact of interviewed practices on the communities served

Most interviewees thought that their practices had a positive impact on the communities they served. They said that they were able to increase access to and affordability of healthcare services, setting lower prices compared to prices for similar services in big cities and offering flexible prices and free services in case of extreme or urgent need. Many of the beneficiaries engaged in charitable activities such as 'health fairs' or 'open doors', which provide services free of charge.

I think the establishment of our services served an important role: people do not need to travel to the city, which is not close, 130 km. (KI 10)

Almost all interviewees claimed that they created new jobs in their communities, which they thought was very important given the high rates of unemployment in rural and semirural communities of Armenia.

The main advantage of opening the ultrasound center in my town is the fact that the clients are able to do the diagnostic procedure here [in the town of practice] rather than travel to [nearby big city] or Yerevan. Also here we create some job opportunities. The nurse of our center was working in Yerevan and now she is able to live and work in her home town. (KI 6)

The participants felt they were providing better quality services, which were not available in these communities before (eg up-to-date diagnostic and dental services, a wider range of pharmaceuticals and counselling by a professional pharmacologist), or creating opportunities for the local population to get those services (eg through visiting professionals or samples sent to Yerevan for investigation).

The knowledge level of doctors has increased, they treat not only based on the symptoms, but up-to-date laboratory data. (KI 10)

Discussion

Recent studies in several LMICs have reported increasing utilization of private services[3-5] and further shifts towards privatization of outpatient services[24,28-30] despite persistently high levels of poverty. While the private sector is becoming more and more important in LMICs, opening private services in rural areas remains challenging in most settings, including Armenia[6]. Entrepreneurs

operating in rural and semirural communities of Armenia have to overcome barriers such as high investment cost, intense competition with state facilities, outdated laws and regulations, and a lack of entrepreneurship and healthcare quality assurance skills.

Imbalance between investment cost and profitability

This study found that the anticipated risk of bankruptcy or inability to return the investments was the strongest perceived barrier in opening and operating private healthcare-related practices in rural areas of Armenia. This concern is largely explained by the impoverishment of Armenian rural areas, which started after the collapse of the Soviet Union and continued after the global economic crisis of 2008–2012[31]. Balabanova et al (2004) reported that 42.4% of their study respondents in Armenia did not seek medical care although they felt they should have done so, and 78% of them mentioned the lack of finances as the reason for not seeking care[15].

Need for supportive policies and regulations

The existence of unfavorable laws and regulations in Armenia was another issue faced by the study participants. In many countries, governments develop policies and programs to support private medical entrepreneurship[32]. Following the existing examples from other countries, in 2015 the Armenian Government issued regulations that allow public authorities to contract with private providers of care[33], which was an important step to facilitate the establishment and operation of private practices. The role of international donors has also been important in Armenia in supporting private sector provision initiatives, similar to that in other LMICs[4]. However, there is still room for improvement, particularly in the area of licensing and tax regulation, which created challenges for many study participants.

The licensing requirements for healthcare facilities were first established in 2002, and since then have undergone several revisions[34]. Further improvements, as well as adjustments to bring them into conformity with internationally recognized standards, could ease the process of establishing private practices in rural areas.

Lack of entrepreneurship and quality assurance skills

As expected, the study found a perceived lack of entrepreneurship skills among participants, most of whom were trained in health care and medicine only. More concerning was their poor awareness of quality assurance and limited ability to implement the corresponding measures at their facilities. The quality assurance measures introduced by the Ministry of Health of Armenia in 2006 were limited to the implementation of a performance-based financing system, which linked the payments of primary healthcare providers to their performance in accordance with 27 quality indicators[35]. The absence of established standards, monitoring and reporting by both governmental and non-governmental healthcare agencies also contribute to the weak level of quality oversight throughout the healthcare system.

A study conducted in Armenia in 2014 showed that there was extremely limited evidence and understanding of how quality and safety were perceived and defined by different stakeholders in Armenian health care[36]. The study showed that blame and hierarchical control were the main driving forces of the safety and quality initiatives[36]. Studies conducted in other parts of the world have shown that quality assurance within private practices is a ubiquitous challenge[2]. Many LMIC governments are lacking capacity for overseeing control of the quality of care in the private sector[5,24]. In order to address these issues, various experts have recommended development and implementation of multifaceted context-specific strategies, including the adaptation and dissemination of evidence-based practices, as well as the development of mechanisms for assuring and monitoring service quality[5].

One of the measures to address the lack of training in quality assurance could be the provision of professional development training in this field. Such training has the potential to increase knowledge of quality assurance, although with rising awareness of the 'know–do' gap in medicine, it remains to be determined whether such interventions will translate into practice changes[37,38].

The implementation of mentoring practices in the healthcare field has proven to be a good tool to strengthen healthcare quality in developing countries[38].

Driving factors for health entrepreneurship in rural Armenia

Interestingly, despite being aware of some of the mentioned barriers and challenges and anticipating more of them, the participants of this study still made a decision to open their practices. According to them, the strongest drivers of establishing a private practice were the unpredictability of the job market in Armenia, which made the respondents question the stability of their state-funded jobs, and the lack of satisfaction with their work at former workplaces. The major factor that made the study participants happy with their current work was their perceived ability to positively impact the communities they served by increasing access to and utilization of healthcare services there.

One of the strategies used by the study participants to attract more customers was the provision of community health education, which in turn increased the demand for regular preventive check-ups. In order to address low utilization of private healthcare services, patients and communities ought to be educated on effective treatment-seeking behaviors[5]. Also, according to the study participants, the availability of modern diagnostic methods and advanced care brought by their services played a positive role in improving the care for their patients. Finally, almost all interviewees claimed that they created new jobs in their communities, which they thought had a significant impact on rural development given the high rates of unemployment in rural and semirural communities of Armenia[23].

Strengths and limitations

This study was the first attempt to gain insight into the challenges faced by the owners of private medical practices in rural regions of Armenia. To the best of the authors' knowledge, this topic has not been explored in other former Soviet Union countries to date; therefore, the findings can be useful for these countries as well. Because of the small number and variety of private practices in rural Armenia, the findings might have limited relevance to other types of private practices not explored in this study.

Conclusion

The findings of the study suggest that high investment cost, intense competition with state-owned facilities, regulatory hurdles, and a lack of entrepreneurship and healthcare quality assurance skills were the perceived barriers to establishing and operating private healthcare practices in rural regions of Armenia. Dissatisfaction of healthcare providers with their work conditions in state-owned facilities, instability of the job market, and having a clear business/marketing strategy were the perceived facilitators to opening private practices.

Given these findings, interventions such as training on healthcare quality assurance and entrepreneurship skills, continuous supportive supervision (mentoring) and professional guidance of entrepreneurs should be considered as tools to facilitate establishment of successful private health practices in rural regions of Armenia.

Acknowledgements

The authors thank the Turpanjian Family Educational Foundation for funding current research, and the Ministry of Health of the Republic of Armenia for their contribution in the recruitment of participants. The authors are grateful to Dr Shant Shekherdimian for his thorough review and feedback on the manuscript.

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