



Recruitment & Retention of Doctors in Rural Areas in the Middle East; UAE & Egypt

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Received: 02 January 2026

Published: 01 February 2026

DOI: <https://doi.org/10.5281/zenodo.18298522>

Summary

Background: 50 % of worldwide population live in rural areas with less governmental services specially in healthcare service, health care workers presents 10% of governmental employees, generally these 50 % of population are served with less than 25% of total number of doctors & healthcare providers that's why rural children suffer more health problems than urban, that was red flag for WHO to assign a recommendation in 2010 to solve the issue of bad distribution of doctors & health care providers between rural & urban areas that was based on many studies done in developed countries in Europe, America , Australia & Asia, but there was no studies done or very few in the middle east.

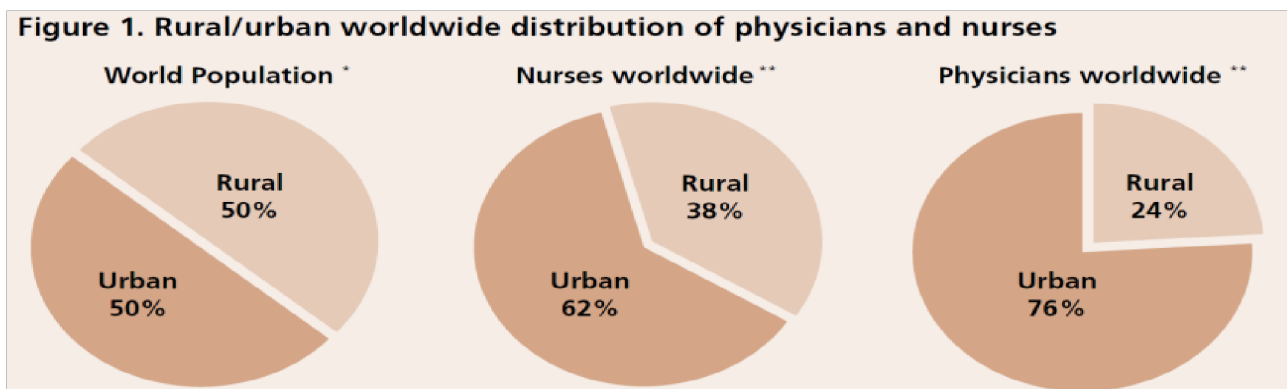
Methods and Results: This research is applied qualitative exploratory research. Is applied as it is searching to solve an existing problem which is decreasing number of health care providers in remote areas. Qualitative as it is dealing with survey & numbers & exploratory as it is interview questionnaire survey to find why doctors don't prefer remote areas to work in & what will motivate them to work rurally & stay there, doctors' sample were divided in between two different countries in middle east, one is high economic level country; UAE & low economic country; Egypt.

Results: almost 70 % of doctors in middle east have rural experience and half of them agree to work rurally but they asked for good financial compensation with different styles of work schedule hoping to have better work-family life balance, several factors play a role on doctors decision as having rural background , presence of compulsory service , rural scholarships & presence of rural training program , the decision to take their families with them depend on facilities like schooling , presence of entertainment & shopping places.

Conclusion: special strategies should be followed to recruit & maintain doctors working in rural areas starting as early as choosing students with rural background , providing scholarships with compulsory rural service , providing special rural training programs with special salary scale with different work styles compatible with different doctor's needs & circumstances & the role of government to improve life in rural areas improving all facilities like schools , recreational centres & shopping places to make it attractive for families.

Introduction

Health Care Workers specially doctors & nurses are the backbone of any health care organization and are considered as the most important factor in public access to health services, in most of the country's 10 % of total governmental employees are working in health care sector. 50 % of the world population live in rural areas with percentage of nurses in rural areas present 38 % of total licensed nurses & percentage of doctors are only 24 % of total licensed doctors so every country should have their national retention policy & plan for retention of doctors & health care provider in rural area.



Rural area is an area with less 50000 population if more it is considered urbanized area. Most of studies about rural areas health care system are done outside the middle east, in this study we will go through discussion in rural areas in middle east specially in two countries one is high income united Arab of emirate (UAE) & a low-income Egypt.

Different issues we must cover & discuss from multiple sides, there is three major, 1st is the country rural health care system issues side itself the 2nd is the carrier & training issues & 3rd is the doctors side issues regarding their lifestyle.

Aim of the research & objectives:

Study ways of retention of health care providers specially doctors in rural & remote areas. Determining & analysing the repellent factors that doctors avoid working in remote areas because of it. Determining & analysing the attracting factors that will attract doctors to work in rural & remote area to augment. Study & analysing the implantation of retention & retention failure of doctors in remote areas.

Research questions during the interviews: Do you have a previous experience in working in remote area, if not do you agree to work there and if not why & what will make you agree?

If you agree what are the factors will convene you to stay, what style of work will be suitable for you & your life & how you prefer to take your off days? Will you bring your family with you, if yes what facilities you need to bring them & if no what can change your mind? For how many years are you planning to stay? What specialities do you think will agree to come & needed, what is the experience level will be more convenient to work in remote area & will they try to improve the service or just do their work without extra miles?

Methodology & Philosophy

This research is applied qualitative exploratory research. Is applied as it is searching to solve an existing problem which is decreasing number of health care providers in remote areas. qualitative as it is dealing with survey & numbers & exploratory as it is interview questionnaire survey to find why doctors don't prefer remote areas to work in & what will motivate them to work there & stay there.

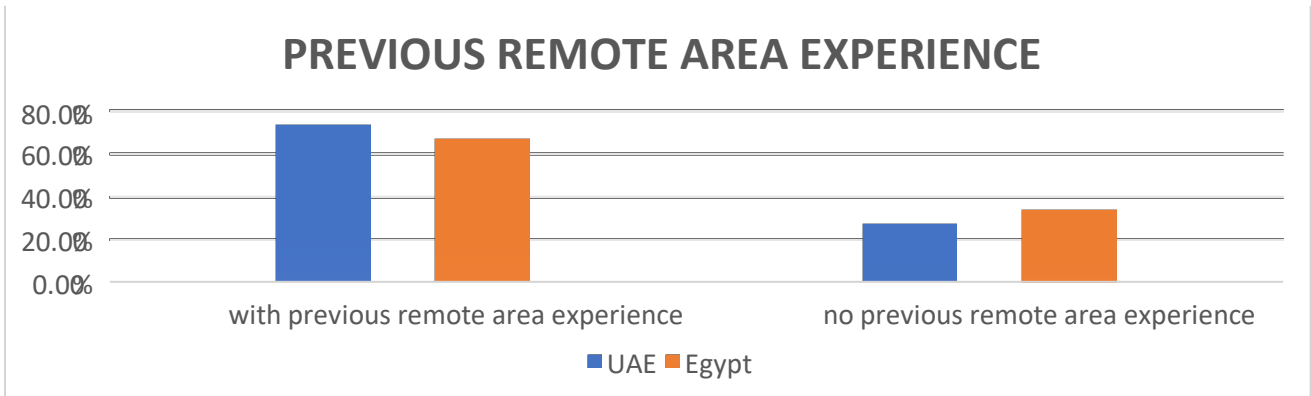
Inclusion criteria Doctors in different specialities in different age group irrespective to gender in both rural & urban areas in United Arab Emirates as high-income country & Egypt as low income country The research will be conducted in a series of questions in interviews will be done with doctors working in both rural & urban areas in equal numbers at least 30 doctors for each to assess their tendency & ability to work or continue working in rural areas & what motivate or prevent & what is the obstacles facing them to work in rural areas. Data collection, Analysis and Findings

Data collection strategy: 60 doctors were chosen from both UAE as high economic country & Egypt as low economic country some have rural experience & some don't have, interview with specified written questions followed by their signature. Five questions were applied in the interview. Qualitative study with questions formatting in interviews will be Open-ended and data formatting in our qualitative study will be textual gained from audio-videotapes, and field notes. Results will be analysed statistically using statistical package for the social science method (SPSS) & then correlate results & detect relations to the subject. Rue data extraction , tables & finding Specialities of doctors samples in UAE & Egypt.

speciality	UAE	Egypt
General practitioner	4	3
Family medicine	1	1
Emergency medicine	3	3
Surgery	3	3
Internal medicine	3	3
Paediatric	3	3
Gyn. & Obs.	3	2
Anaesthesia	2	3
ICU	1	1
Laboratory	1	1
Radiology	1	1
Orthopaedic	1	2
ENT	1	1
Ophthalmology	1	1
Psychiatric	1	1
Cardiology	1	1
Total numbers	30	30

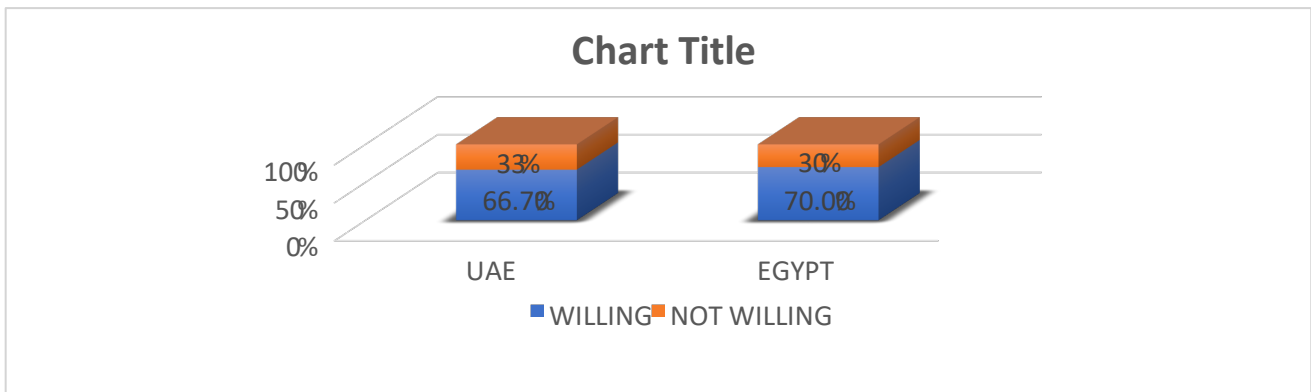
Previous remote area experience

Country	With previous experience	No remote experience
UAE	22 (73.3%)	8 (26.7%)
Egypt	20 (66.7%)	10 (33.3%)



Doctors not willing to work rurally

	UAE	Egypt
Not willing	10 (33.3%)	9 (30%)



Doctors with previous rural experience not willing to work rurally

UAE	Egypt
5 (16.7%) 2 GP, 1 Gyn. & Obs., 1 ICU & 1 cardiology	5 (16.7%) 1 Paediatrician, 1 GP, 1 Surgeon, 1 ortho & 1 anaesthesia

Doctors with no previous rural experience not willing to work rurally

UAE	Egypt
5 (16.7%) 1 ENT, 1 Family medicine, 1 ER, 1 psychiatric & 1 anaesthesia	4 (13.3%) 1 anaesthesia, 1 orthopaedic, 1 psychiatric & 1 surgeon

Doctors with no previous rural experience but willing to work rurally

UAE	Egypt
3 (10%) 1 paediatrician, 1 radiologist & 1 surgeon	6 (20%) 1 radiologist, 1 laboratory, 1 orthopaedic, GP, 1 surgeon & 1 ENT as parttime

Duration that doctors accepting to work rurally

	UAE	Egypt
5 years	15 (50%)	15 (50%)
5 to 10 years	5 (16.7%)	6 (20%)

Work style preferred by doctors who worked or agree to work rurally regarding on & off days

	UAE	Egypt
5 days on & 2 off	12	7
2 days on & 5 off	2	10
1 week on & 1 off	5	3
3 days on & 3 off	6	2
8 days per month	0	2
2 days per month	0	2
TOTAL	25	26

Doctors agreement to bring their families with them in rural areas

	UAE	Egypt
AGREE	20	12
DISAGREE	10	18

Facilities doctors ask to be available to bring their families • 100 % see that good schooling & education, entertainment & recreational centres & shopping places presence are corner stone in the decision to bring their families Factors will convene doctors to work rurally 100 % see that salary (financial benefits) is the most important factor. 100 % see that work – family life balance is the 2nd most important factor.

Specialities needed according to doctors opinion

	UAE	Egypt
Internal medicine	100%	100%
Surgery	100%	100%
Gyn. & Obs.	100%	100%
Paediatric	100%	100%
ER	100%	100%
Anaesthesia	100%	100%
Intensive care	100%	100%
Family medicine	100%	100%
Laboratory	100%	100%
Radiology	100%	100%
General Practitioner	100%	100%
orthopaedic	70%	50%
cardiology	90%	30%
psychiatry	50%	20%
ophthalmology	30%	10%
nephrology	30%	60%
ENT	50%	20%

Conclusions & Recommendations

Conclusion

Most of doctors average 70% in the middle east specially in United Arab emirates & Egypt where study was conducted have previous experience in working in rural areas as it is compulsory service in most of the developing counties except for doctors who are going through the academic pathway & work in university hospitals. Lady doctors refuse more to work rurally as it is tough for their family life. Rural experience during medical school is very important & is crucial to help doctors to make their decision to work rurally.

Rural rotations during internship & residency have positive impact as it may change doctors mind to work rurally. 70 % of doctors included in the study agree to work rurally if they provided their requirement financially, socially & carrier wise. Compulsory rural service remains the corner stone to cover the gap & doctors deficiency in rural areas but still it is temporary solution & these doctors are less experienced, another time for compulsory service for 6 months when a doctor is promoted from resident to a specialist after passing the postgraduate speciality qualification & at that time doctors are more experienced & can help in training of other junior doctors but still it is short time & not a permanent solution.

The general practitioner who refuses to work rurally mostly refuse for lack of training programs & possibility of carrier development. The specialists who refuse to work rurally in some specialities need hand skills like surgery & ICU prefer to work in high flow urban hospitals to keep & upgrade their hand skills. In high economic countries like UAE, it is easier to convenes doctors to work rurally with better salaries than urban countries. Facilities requested by doctors like better schooling as international schools & entertainment like recreational centres & shopping places are more available in high economic countries like UAE but doctors will feel more social deprivation.

In low economic countries like Egypt, it is more difficult to convenes doctors to work rurally because of low salary scales. Facilities requested by doctors like better schooling as international schools & entertainment like recreational centres & shopping places are less available in low economic countries like Egypt. Doctors with rural roots are more likely to accept working rurally as they are used of living ~~there specially with less requested available facilities & requirements in low economic developing~~

countries like Egypt but in high economic country like UAE the acceptance was more, so it is more important to specify like a proportion or share for rural students with long compulsory service.

Family medicine is the most needed speciality in rural areas primary health care centres as can cover simple emergencies, most of simple medical , paediatric , gynaecological , obstetric & ENT diseases & stabilize & then refer to the specialists if needed , so family physician should have a good training in most of specialities & should have good financial compensation. Surgeons should be trained to cover all surgical emergencies & all general surgery procedures & should deal with surgical subspeciality emergencies like vascular surgery emergencies or at least stabilize till refer to tertiary hospital & even should be able to do emergency caesarean sections, laparoscopic & endoscopic procedures, so for sure that needs special training program.

Medical doctors should be able to deal with all medical emergencies including pulmonary, cardiac, neurological, gastrohepatic, renal, rheumatological, infectious emergencies & ICU follow up these issues. Paediatrician should be able to deal with all medical emergencies & neonatal emergencies & cases need PICU admission & they should be able to do most of paediatric procedures. Generally rural doctors should have broad range of skills through a special rural training program.

In high economic level countries like UAE half of doctors prefer to work normally 5 days & off 2 days as they will take their families with them, other doctors prefer to work for 3 days on & 3 off or 1 week on & 1 off as they will leave their families in the city so still doctors are reluctant of taking families with them rurally even in in high economic level countries like UAE.

In low economic level countries like Egypt less than quarter of doctors prefer to work 5 days & off 2 days as they will take their families with them this low percentage of doctors is few due to low salaries in Egypt so most of doctors more than 75 % prefer to work rurally for few days like to finish their 48 hours weekly in 2 days on & 5 off or 8 days per month so they have free days to work in the city & earn a lot of money.

50 % of doctors included in the study agreed to work rurally for 5 years & less than 20 % would like to work rurally up to 10 years as most of them planning to work & to be compensated financially but to make it their residency still need a lot of work from different aspects to convenes doctors to stay for ever.

Transportations & quality of roads remains a big issue in big countries like Egypt as most of doctors don't like to stay rurally & they prefer working 2 days per week or 8 days per month & distance between work & their cities could be hundreds of kilometres & consume several hours.

100% of doctors concluded that financial incentives & total income was the main factor driving all doctors to agree to work rurally followed by work family life balance.

Social activities & incorporation of doctors in the rural community can help them to stay in rural areas specially they feel there a true respect and appreciation.

The most important speciality needed in rural area is family medicine, a well-trained family physician can deal with most of outpatient cases of internal medicine, paediatric, gynaecology & obstetric, minor surgical procedures like abscess & circumcision & dermatology to decrease the need of referral to urban secondary hospitals & specialists & to build a full data base about health status of all patients & families & make health care files that will help in treatment of patients.

In rural community hospitals providing secondary health care level the specialities needed are emergency medicine, internal medicine, surgery, gynaecology and obstetrics, paediatric, laboratory, radiology, intensive care, anaesthesia & general practitioner these specialities are basically needed in all countries but in Egypt more renal impairment are more prevalent so presence of nephrology specialist is a basic demand then comes orthopaedic, cardiology psychiatry, ophthalmology & ENT to less extent as they can be shared in between two hospitals in UAE nephrology , orthopaedic, cardiology psychiatry, ophthalmology, dermatology & ENT the demand is less & specialists of these specialities can be shared in between two hospitals.

As we can see from the previous conclusion recruitment and retention of doctors in rural areas is multifactorial complex process starting from choosing the medical students with rural background & providing them special then rural rotation during their internship & then during residency program , providing special rural training pathway for speciality residency with less requirements in comparison to normal residency programs then the rule of government to make facilities available in rural areas such as good schools, entertainment recreational centres & shopping centres & compensate doctors financial to encourage them to work rurally & take their families there.

Recommendations

Every country should have its strategic plan to cover the shortage of doctors in rural areas according to economic level & other factors. It is the role of the government to improve rural life facilities including schools, entertainment places like recreational centres & clubs , shopping places , roads & transportation.

Another important role of the government is to establish a special salary scale for rural healthcare system specially doctors & nurses to convince them to stay working rurally as financial compensation & incentives is the corner stone attracting factors for doctors.

Scholarships should be provided for medical students with rural background or students willing to work rurally for at least 10 years as a compulsory service, these scholarships will be provided to students with less high school scores or for whom cant afford for medical collages fesses.

A special rural training program should be established for each speciality providing doctors an excellent training of broad range of skills , specially family medicine training program should have good training in internal medicine with all of its subspecialities , paediatric , gynaecology & obstetric & surgery to be able to carry out all of primary health care responsibilities , for surgical rural training program surgeon should be trained on general surgery operations, endoscopic & laparoscopic procedures , emergency operations even emergency caesarean sections , lifesaving surgeries in subspecialities like vascular emergencies & trauma surgery , for internal medicine rural training program training should include all medicine subspeciality like cardiology , neurology , pulmonology , gastroenterology , infectious disease, haematology , rheumatology & immunology & deal with all medical emergencies, so all rural training programs aim to train them on wide range of skills and knowledge not only the basic speciality skills.

Rural rotation during internship should be compulsory to expose the fresh graduated doctors to rural life & rural health care that they may like & change their mind to work rurally.

Non rural training programs should have rural rotations to expose the residents to rural life & rural health care and deal with common communicable diseases and may like & change their mind to work rurally.

Special consideration should be adjusted in work style of doctors in rural areas specially in countries with low economic level & low salary scale so doctors can work two days per week or 8 days per month to have time to work as parttime & go back to their cities if they don't like to stay their whole time rurally.

To attract doctors to take their families in rural areas where they work some encouragement for them can be done even without making special salary scale like providing their wives or husbands jobs in the rural health care so the stability of them as a couple will be more & they will stay there and stabilize their family life. Incorporation of doctors in the rural community is such a very important factor so doctors become more stable socially in the community and stay and feel it is their home this also can be done through providing doctors lands and house in the rural area where they work so they feel they are part of this community and working there is not a stationary part of their life, but it is their life. Special advantages & benefits can be provided for rural doctors like long term bank loans with very low profit margin so doctors can buy a house, land or car in the rural areas where they work with only prove that they work rurally to get these loans. Sharing revenue is a strategy can be implemented in low economic countries primary rural health care after the official working time finish at two pm patients seen by family physician will pay extra fees for being seen after the official working time and this money will go to the doctor as if it is his private clinic & for sure the fees will be less than private clinic so reaching win-win situation between doctors & patients same will be applied in small community hospitals evening outpatient clinics will be share revenue system.

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