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Cynthia Randina, Hopatcong Superintendent of Schools, Announces –

Kelly Maegerlein presented her research paper: <u>Implementing Public Health in Southern India:</u> <u>Two Streams of Thought</u>, to an interested audience at the Sussex County Library in Stanhope, NJ on June 7, 2016. Kelly explained to the audience (with her research) why it is necessary for two strategies to be used in assisting the poor in rural India who are in dire need of nutrition and medical care; Kelly contrasted these strategies in a power point presentation.

Kelly is currently in Boston until August 10th at the National Student Leadership Conference and will be residing and taking classes on campus at Harvard and doing rounds with doctors and med students from Harvard University Hospital. She will also be visiting Boston University while there as it is a prospective college.



Kelly Maegerlein

April 2016

Implementing Public Health in Southern India: Two Streams of Thought

Preface

In this paper, the state of public health in rural southern India and the methods employed to remedy the situation will be analyzed in three parts. The two contrasting streams of thought, either bringing in trained medical professionals or teaching select members of the villages medicinal skills, will be weighed and considered to draw the conclusion as to which method brings the best results and should be implemented more than the other by relief groups. In addition, the actions of various organizations and the results of various studies conducted in or centered around southern India and their individual contributions to each methodology will be identified and weighed in relation to their success in helping to implement public health utilizing the contrasting streams of thought. The effects of the efforts of volunteer groups and the studies implemented will lead towards the conclusion that it is necessary to utilize the provisions of both streams of thought in order to raise the standard of public health in rural India and to promote community development because both ideologies have vital aspects necessary for raising the standard of health.

Part 1

The overall state of public health all throughout India is very poor in comparison to some other countries across the world. Adults and children alike experience high rates of malnutrition and chronic illness, which is worsened by the conditions around them and the lack of access to medical care, proper food, and clean drinking water. These issues, while prevalent in all areas of the country, typically are in particular concentration in the southernmost rural regions nearest to the state of Tamil Nadu. It is due to these reasons that there must be increased attention to the lower segment of the country for implementing relief healthcare measures.

Malnutrition is a serious problem that is evident in underdeveloped countries around the world and stems from a lack of adequate diet, and India in its entirety experiences one of the world's highest rates of childhood malnutrition. Studies conducted in 2013 found that half of the country's 120 million children are underweight, and other related health issues such as stunting, wasting, and anemia, also have high prevalence, having been found with rates of 45%, 20%, and 75% respectively. These problems all stem from a lack of resources, which makes it so the kids either are not eating enough, or what they do get to eat does not have the necessary nutrients ("Helping India Combat Persistently High Rates of Malnutrition", 2013).

Children are also afflicted by illness, and in their youngest years of life they are especially vulnerable. On the western outskirts of Vellore in Tamil Nadu, a study on water safety and its relation to infectious diseases was conducted. The 176 kids involved received either bottled or municipal drinking water and were visited weekly at home until their second birthday. The results of this case study were that, in the two years alone, a startling 3992 cases of disease occurred in those children. Such findings solidify the fact that the conditions in rural areas make it so that diseases are easily spread, and if the children happen to not be malnourished, they are still likely to be plagued with disease from everyday necessities such as water (Sarkar, 2013).

Adults are not impervious to these same afflictions that are found in children, but the most common concern when it comes to them is disease. The two main types of diseases are either infectious or non-infectious, but they are both just as deadly. Since 2006, it was discovered that the leading cause of death in rural India is from chronic illness, mainly regarding the circulatory system. These issues stem from poor diet and living conditions, and the lack of proper access to medical professionals because of the non-standardized healthcare only worsens the problem (Joshi, 2006).

The major issues in rural India that make this health situation worse are the lack of proper knowledge by village leaders that there are prevalent health issues that threaten their wellbeing and the lack of proper medical attention when illness does arise. This makes it so that easily treated illnesses are

ignored and go uncared for, so needless suffering and death takes place when it could have been easily avoided with proper knowledge. This lack of knowledge could be countered with a prevalence of trained medical professionals, but there is just the opposite of that in the rural south ("Rural Pre-Ventures Charitable Trust").

Not only does the prevalence of malnutrition and chronic illness cause needless pain and suffering, but the poor health status of the residents in the villages affects their society. If the residents are not well enough to care for themselves, they cannot care for their community either, and there will be no developments to further the village as a whole. This is why it is necessary for interference to take place to ameliorate the public health situation. If the healthcare system cannot be standardized, we must still get involved to help alleviate some of the suffering that goes on, which is where the two streams of thought in implementing care come into play.

Part 2

The first stream of thought goes along with the practice of securing the services of medical professionals and institutions so they can volunteer their time in rural villages to treat those in need. Some ideas that go along with this are establishing volunteer health centers where the village people can be analyzed and given the correct care that they are in need of. This also goes hand in hand with educating the residents of the villages on basic health and wellness so some of the illness could possibly be avoided. All this being said, an integral part of this ideology is providing care while also respecting the people in need of help.

An organization that takes this mindset and applies it practically to their actions is the Rural Pre-Ventures Charitable Trust (RPV). They are one of the many groups focused in rural southern India, more specifically operating in the Upper Hills region surrounding the South Indian Hill Station of Kodaikanal. They have made it their goal to improve the lives of people in rural villages while respecting their culture, providing medical support, pharmaceuticals, food supplements, and health education in order to bring about development in the communities they are centered in ("Objectives").

In the village of Poombarai, located at the heart of the Palni Hills, RPV has established a health clinic that operates once a week on Thursdays. Residents line up to see the volunteer doctor where they are assessed for their ailments and given appropriate care and pharmaceuticals and may be referred to nearby hospitals if more intense care is necessary. An important aspect of this practice other than offering much needed free care to the residents of the village is that the physicians show respect for the people and their values by attending local festivals and events and go about daily activities amongst those in communities where they work. Also, in addition to sedentary activities, this organization provides mobile care. They drive a car out to the nearby village of Gundupatti to conduct another free clinic during the week and have recently acquired a Mobile Medical Van that will be able to visit even more remote villages three or four more times a week ("Outreach").

Rural Pre-Ventures also has specialized branches in addition to general health, which are in dentistry and eye. They have set up so-called camps where they examine and evaluate as many patients as possible in a period of time. Volunteer teams of dentists from the Sri Ramachandra Dental University in Chennai have visited the village of Poombarai twice in the last year and have examined over 1000 patients. In addition, a team of ten professional eye doctors and technicians from the Krishnan Kovil Eye Hospital near Madurai volunteered to come out and provide examinations too. It is necessary for such specialized opinions to be available in addition to general healthcare so that possible issues can be identified before they become out of control ("Outreach").

This methodology has the ability to provide many benefits to the rural south because it successfully gives villages access to proper medical attention, and the actions of Rural Pre-Ventures exemplify further the positive effects of implementing this methodology. One possible downside of implementing solely this ideology is that it is somewhat dependent in nature. The villagers receive their basic care from a group of outsiders, which leaves their basic level of health dependent on people other than the ones that reside primarily in such villages. An aspect of this methodology does include educating the villagers about the prevalence of smaller health issues to prevent unneeded illness, but this education

does not make it so they can fully treat themselves if sickness does arise; it makes it so they are aware they need to go see the local doctor to get treated. In the end, the villagers still rely on outsider professionals for care, which is not necessarily a bad thing unless we can no longer provide such voluntary care.

Part 3

The second stream of thought applies the ideology that health issues are best treated from within the villages through trained individuals called Village Health Workers (VHW's). Training people inside the villages makes it so that the villages do not have to rely on outsiders to provide basic health care to those who are ill. Such an ideology theoretically allows the rural villages to have access to a more independent way of attaining public health, which is seen as preferable since gaining independency is often seen as a necessary step toward fully developing as a community.

An organization that applies this stream of thought to its work is the Comprehensive Rural Health Project (CRHP), an entity that provides training in rural areas in 178 countries all over the world, India in particular. They work by "mobilizing and building the capacity of communities to achieve access to comprehensive development and freedom from stigma, poverty and disease" through access to care from those residing within the communities themselves.

The care comes in the form of the Village Health Workers whom this organization trains so they can provide medical attention to residents of the villages they live in ("Comprehensive Rural Health Project").

The major aspects of this organization are the training of the Village Health Workers and the Mobile Health Team. The Health Workers are medically trained in the Julia Hospital in the CRHP campus located in Jamkhed. They are seen as the key aspect to achieving community development because they not only function as medical professionals, but also facilitate preventative measures to stop illness from developing in the first place. Examples of such measures include acknowledgment of the need for better sanitation and hygiene within the communities and comprehensive family planning. They also work within the communities to develop groups such as the Farmer's Club, Women's Self-Help Groups and

Adolescent Girls/Boys Programs, which help the villagers to identify the socioeconomic and healthcare barriers in the way of their development so they can set the parameters for applicable solutions ("Community Groups").

While the Health Workers provide a sizeable portion of the care, the Mobile Health Team also plays an important role. Since the VHW system is typically employed in extremely remote and hard to reach villages, the Team serves as the link between the communities and outside developmental personnel. It consists of two social workers, a paramedic, a nurse, and one doctor and conducts home visits to assist Health Workers in more complicated health issues, also collecting vital statistics for healthcare monitoring. The Social Workers advise on social and economic initiatives led by the Women's Self-Help Group, as well as meet regularly with Farmers' Clubs, and Adolescent groups. Overall, the team functions as the means to getting specialized care into the villages while at the same time letting the villages be primarily independent through the work of the Health Workers ("Mobile Health Team").

The practice of teaching others medical skills, even not directly through organizations such as CRHP, has been proven to be an effective measure for raising the standard of healthcare in the villages. This idea is exemplified in a study conducted to document the effectiveness of first aid training on mothers in a rural area of South India. In the study, 140 mothers were tested on their first aid skills, and then were given a course in basic first aid training. After the course ended, they retook the same test and the new results showed that their knowledge on first aid training had increased significantly. The results proves that training individuals improves their familiarity with medicine, which can then lead to them identifying and treating their own and others' issues. Since this kind of training is applied in the daily work of the Health Workers, the core idea of the VHW system is proven to be effective (Sonavane, 2016).

The Village Health Worker system employed by this stream of thought supports the independent side of aiding southern India in its health issues. By teaching the villagers medical skills and preventative measures, it makes it so that the villages can provide their own basic medical care for the residents.

However, if this idea of teaching medical skills is only kept on a small scale, it might not mean that the

villages can become fully independent, and another downside to this idea is that there will be a lack in specialized training from within the villages. It is true that individual VHW's can be taught basic skills, but specialized care is again left to outsider intervention through the Mobile Health Teams and such. The one major, and potentially negative, aspect of this ideology that makes it necessary for to be applied in conjunction with other measures is the fact that it is mostly applied in extremely secluded villages. So while it is providing benefits to areas in rural southern India, most of the time they are the areas where outside intervention is too hard to obtain for long periods of time, which is why this self-sustaining method is used. In general, this ideology can be applied successfully to address public health issues in a few areas of rural India, but it is only if it is expanded to other areas that it can be considered the most beneficial.

Conclusion

Both of the streams of thought in implementing public have merit in their own individual applications. In a way, these two ideas are opposites of one another; the first ideology provides the villages an entity to depend on for fixing health issues, while the second allows them to depend on themselves primarily for care. The first one is applied to areas that can be reached easily by outsiders, while the second is typically applied to hard to reach places. In order to best bring about community development in all types of village settings, there should be a balance between the two. If we cannot always be there to provide care like we have been doing, the rural areas need to be able to support themselves in some basic way with a few trained individuals amongst them acting as VHW's. Volunteer organizations should be there to provide additional care when specialized cases that need extra attention arise such as with Mobile Health Teams or volunteer clinics and hospitals. If these two methods work side by side, many villages will be able to have their health issues treated from both inside and out while also being educated in preventative measures. Overall, each stream of thought seeks to accomplish essentially the same thing and is alike in the kind of care they provide. With both of these ideologies working together in harmony, it is possible to raise the standard of health in rural southern India and

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