

Public Health Operations in the JSOTF-P

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ABSTRACT

Medical personnel have a proven operational and strategic role as part of Counterinsurgency (COIN) and Foreign Internal Defense (FID) operations. In addition to the traditional employment of medical assets in Medical Civic Action Programs, commanders can utilize their medical resources in a teaching and educational capacity to effectively target an entire village (men, women, and children), with minimal logistical support. In the Joint Special Operations Task Force-Philippines, Environmental Science Engineer Officers and veterinarians added additional capabilities and facilitated educational programs that stimulate the coordination of local, military, and government resources to improve public health infrastructure and make a sustainable, lasting impact.

The Joint Special Operations Task Force-Philippines (JSOTF-P) conducts an extensive Foreign Internal Defense (FID) mission in support of the Government of the Philippines (GRP) counterinsurgency (COIN) efforts in the southern Philippines.¹ The 1st Special Forces Group (Airborne) (1SFG (A)) veterinarian and environmental science engineering officer (ESEO) supported this mission by conducting separate medical and veterinary service missions in May and June 2010. The 1SFG (A) ESEO was part of a medical civic-action program (MEDCAP) in conjunction with medical and dental staff, while the veterinarian conducted a veterinary civic-action program (VETCAP) with the JSOTF-P and Marine Corps Special Operations Command (MARSOC) veterinarians. Although the JSOTF-P command deemed both the MEDCAP and VETCAP missions successful in their own right, upon return to CONUS the 1SFG (A) ESEO and veterinarian concluded these missions could merge into a joint Public Health Civic-Action Program (PHCAP). This model could be useful throughout the JSOTF-P, as well as other SOTFs worldwide.

The following vignettes from the 1SFG (A) ESEO and Veterinarian missions provide an overview of their separate public health missions supporting the JSOTF-P. These vignettes illustrate the potential of combining these two assets together with their ability to target an entire barangay (village) population with minimal logistical support, while also providing a sustained positive impact on their health and well-being.

ESEO PUBLIC HEALTH MISSION

In conjunction with 1SFG (A) medical and dental staff, the ESEO traveled to eleven barangays participating in MEDCAPs led by Armed Forces of the Philippines (AFP) and JSOTF-P personnel. The population attending the MEDCAPs consisted mostly of women and children, with some traveling significant distances from the barangay's outskirts to receive medical care. In general, many fewer men were present when operations primarily focused on medical care, as they were often in the fields tending to their crops and animals.

The ESEO's primary mission during the MEDCAPs was to work with the AFP and local Ministry of Health personnel to provide and facilitate public health education to the local populace. Large contingents of patients waiting to receive medical evaluations and treatment provided a captive audience for those involved with teaching the public health aspects of the MEDCAP. The public health educators were able to capitalize on this teaching opportunity and training event to provide a tremendous influence on the barangay's long-term well being.

Previous MEDCAPs in the area did not emphasize the public health education aspect to potentially chronic conditions, and instead focused more on acute interventions that provided a brief course of treatment (e.g., administration and distribution of antibiotics, etc). In contrast, educationally based programs have the potential to provide knowledge that can have an enduring effect on a given population. On Jolo Island, the ESEO collaborated with the island's WASH (water, sanitation, and hygiene) coordinator and Secretary General for Muslim Women of Peace Advocates to incorporate public health aspects into the MEDCAPs. Her initiative and willingness to travel to the barangays everyday to lead classes and discussions, and provide the local "face" to this influential audience was the critical asset for its success. On the other islands, the AFP and U.S. leadership did not conduct prior coordination with the local WASH personnel to integrate their capabilities into the MEDCAPs. Due to this lack of coordination, the U.S. Forces were more involved in the public health portion of the MEDCAPs than the Jolo Island model. Utilizing the Jolo Island model to increase planning and participation by the local government and host nation military, together with U.S. Special Forces leadership's unified appreciation and emphasis on the operational planning for the public health education aspect of MEDCAPs, would significantly improve their overall effectiveness.

The public health classes taught to the local women consisted of food and waterborne disease transmission cycles and food sanitation, along with recommended countermeasures. The food sanitation class was based on the World



Photo by: MC2 Joshua Scott

Figure 1: *Barangay children participate in proper hand-washing exercises.*

Health Organization (WHO) Keys to Safer Food, and then further tailored to the local constraints and limitations (e.g., no refrigeration, limited potable water).² Several classes evolved into interactive sessions in which the educators and local women conversed about their specific situations and how to best protect their families. From a public health perspective, those sessions where local women shared ideas and knowledge amongst themselves offered the best opportunity to provide sustainable health practices to the barangay's families. Children were also instructed on the



Photo by: MC2 Joshua Scott

Figure 2: *Barangay children receive a class on the food and waterborne disease transmission cycle from a local teacher.*

food and waterborne disease transmission cycle utilizing cartoon based visual aids, along with proper hand-washing exercises and coloring contests as they “pledged to wash their hands.” The most successful sessions were those when older children took the initiative and led the younger ones in teaching the disease cycles and demonstrating proper hand-washing as the adults observed. As the public health education aspect continues to be incorporated into traditional MEDCAPs, the classes will continue to evolve and will have even greater potential to significantly improve the local food and water sanitation situation.

While at the barangays, the ESEO and local leaders conducted several water system assessments and provided their specific recommendations to protect the barangays' sources and distribution systems. As a result of the ESEO's water system assessments and the Jolo Island's WASH coordinator's persistent efforts, three barangays are piloting a novel method for the region to obtain potable water for consumption. The program, known as Solar Water Disinfection (SODIS) utilizes the sun's UV radiation to produce safe drinking water.³ Implementation of these relatively simple recommendations will increase the potability

of the barangays' water supply, and subsequently the barangays' long-term health.



Photo by: MC2 Joshua Scott

Figure 3: *Local leaders, WASH personnel, and a ISFG (A) ESEO discuss the barangay's water system and specific remediation*

VETERINARY PUBLIC HEALTH MISSION

The JSOTF-P Veterinarian directed and supervised the veterinary public health operations in the JSOTF-P. During the month of June 2010, the JSOTF-P veterinarian coordinated veterinary education and treatment operations on the islands of Jolo, Basilan, and Mindanao in coordination with the local governmental infrastructure, and with the assistance of the 1st SFG (A) and MARSOC veterinarians. The goals of the mission were to educate and empower local farmers, improve overall herd health, reduce zoonotic disease, and provide a linkage between the AFP and government resources.



Figure 4: *An AFP Marine medic injects a cow with Ivermectin dewormer (Jolo)*

On Jolo, all operations occurred in conjunction with the AFP and the Jolo Department of Agriculture. The AFP liaisons would choose locations for veterinary missions that were of strategic or operational importance, coordinate with the barangay leadership and local populace, and escort



Figure 5: *JSOTF-P Vet teaches seminar on Basilan*

the Operational Detachment-Alpha (ODA) and veterinary team to the barangay.

The Department of Agriculture and veterinarians began each mission with an educational seminar that included topics on overall herd health, reducing parasite transmission and infection, and how to administer medications to animals. The Department of Agriculture personnel used this forum to discuss current governmental programs (WASH, Dengue, and Malaria programs) and educate farmers on the hazards of pesticide usage and meat residues. Filipino farmers have a higher overall incidence of cancer than the general population, which the Department of Agriculture partially attributed to chronic pesticide exposure. In this area it was common for farmers to mix agricultural pesticides with coconut milk and apply the mixture by hand to the backs of cattle. Although effective, the product contained very high levels of xylene, which is a potent carcino-

Figure 6:
Animal Scientists, AFP, Provincial Vet, and ISFG (A) Vet pause for a photo (Basilan)



gen. After the seminar, AFP medics (previously trained on appropriate techniques) administered oral and injectable dewormers and vitamin supplements to cattle, goats, and water buffalo under the supervision of U.S. veterinarians. Farmers were encouraged to treat their own animals and to bring any cats or dogs for rabies vaccination. An equal number of men and women attended the seminars and brought their animals for treatment. The authors hypothesize that the veterinary seminars attracted more males than the public health seminars because the men raised and tended the livestock.

On the islands of Basilan and Mindanao, similar operations were conducted in the barangays. On Basilan, the JSOTF-P veterinarian, along with the Civil Affairs (CA) Team, AFP community liaison, and community leaders, coordinated a seminar for animal scientists, college students, veterinarians, governmental leadership, and farmers. This seminar covered a broad array of topics including toxic plants, toxic chemicals, zoonotic disease transmission, animal nutrition, herd health, and reproduction. The day following the seminar many of the attendees converged to provide veterinary care in local barangays. U.S. and Filipino veterinarians provided hands-on teaching to the college students, who conducted most of the treatments or

taught the farmers. Additionally, the JSOTF-P Vet coordinated with the Marawi campus of Mindanao State University to hold a rabies awareness campaign and vaccination day which was a huge success.

During the month the veterinary team visited 15 barangays and treated hundreds of animals for parasites and nutritional deficiencies. However the tremendous success of the mission is not measured by these numbers. Instead the success of these missions is evident because they are sustainable and are ongoing. Currently, the Jolo Department of Agriculture is conducting public health and training seminars in conjunction with the AFP, both with and without U.S. involvement. On all three islands multiple agencies and individuals were inspired and enabled to spearhead public health, veterinary, and agriculture programs seminars in their respective areas of responsibility.

CONCLUSION

The partnership and collaboration of the government, military, and the local populace during these medical and veterinary seminars opened the doors for many new programs and initiatives.^{4,5} Plans are in place for additional educational events, a comprehensive sanitary Dabihah halal slaughter program in cooperation with the local imams, and the development of a co-operative system. The co-operative system will encourage farmers to pool resources for grazing areas, purchase veterinary supplies and equipment, and procure bulls with increased genetic potential. Local leaders are beginning to plan for future educational events for barangay leadership and medical personnel that highlight the importance of sanitation to overall public health and community well-being. These include on-site excreta collection and treatment; WASH outbreak response and investigation; water and vector-borne disease prevention; and sanitary rainwater harvesting methods.

The combination of public health efforts by the ESEO and veterinarian within the Special Operations community parallels the formation of the U.S. Army Public Health Command (Provisional). The Public Health Command (Provisional) is a MEDCOM initiative uniting the missions of the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) and the U.S. Army Veterinary Command (VETCOM). Personnel from both organizations bring their specific public health specialties together to provide a combined effort promoting force health protection in support of the DOD's missions around the world.

Since some elements of the ESEO and Veterinary goals and missions inherently overlap, combining these two entities during operations grants a commander the ability to positively impact an entire community of men, women, and children with minimal logistical support.

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