# Global Health Uganda 2018: Where are we now?



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# Global Health Uganda 2018

Since 2015, OSU physicians and students have been traveling to Uganda in coordination with the Pros for Africa organization and Sister Rosemary to assist in Ugandan healthcare. Each year a team travels to Uganda with supplies and provides medical care to various towns throughout Uganda.

This past fall, our team went to Uganda and provided medical care and education to the people of Gulu and Atiak. While in the country our team provided medication and medical care to patients in need. We were able to work in close coordination with Saint Monica's Health clinic, on the grounds of Sister Rosemary's compound, and see how an established clinic is conducted. We contrasted this with the minimal rural clinic in Atiak where we were able to provide most medications used and see the different aspects of health care in Uganda.

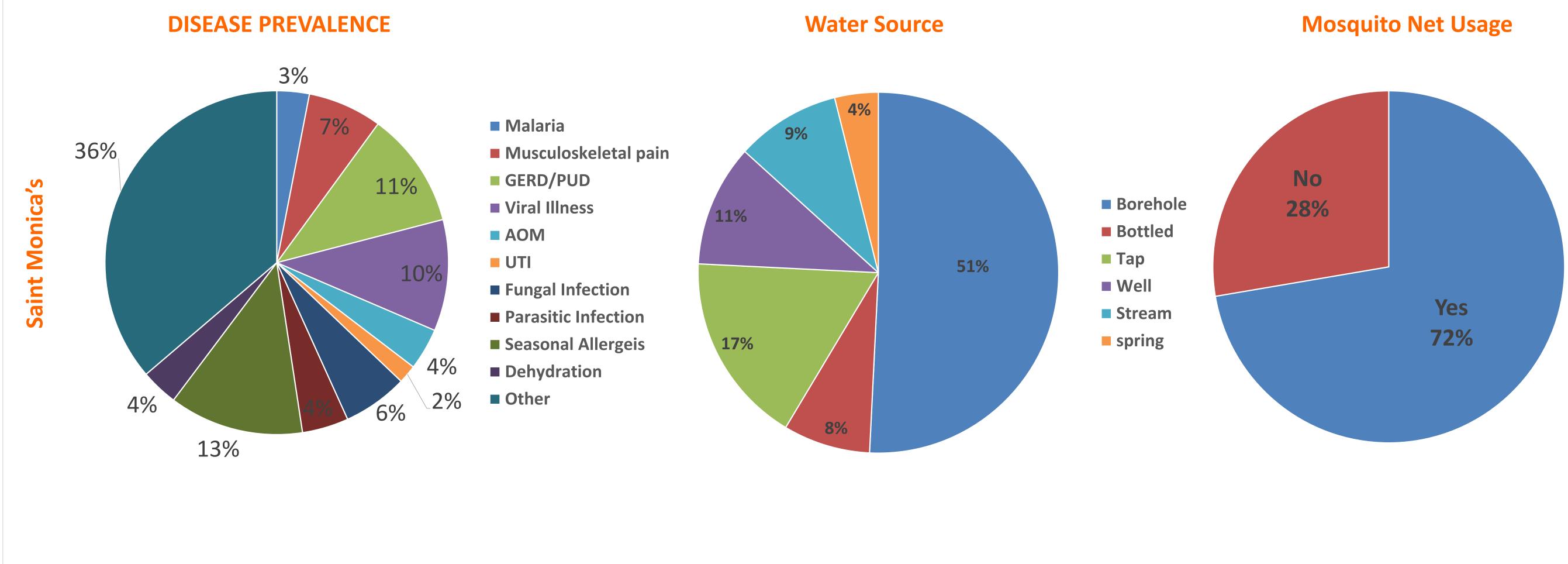
# Saint Monica's

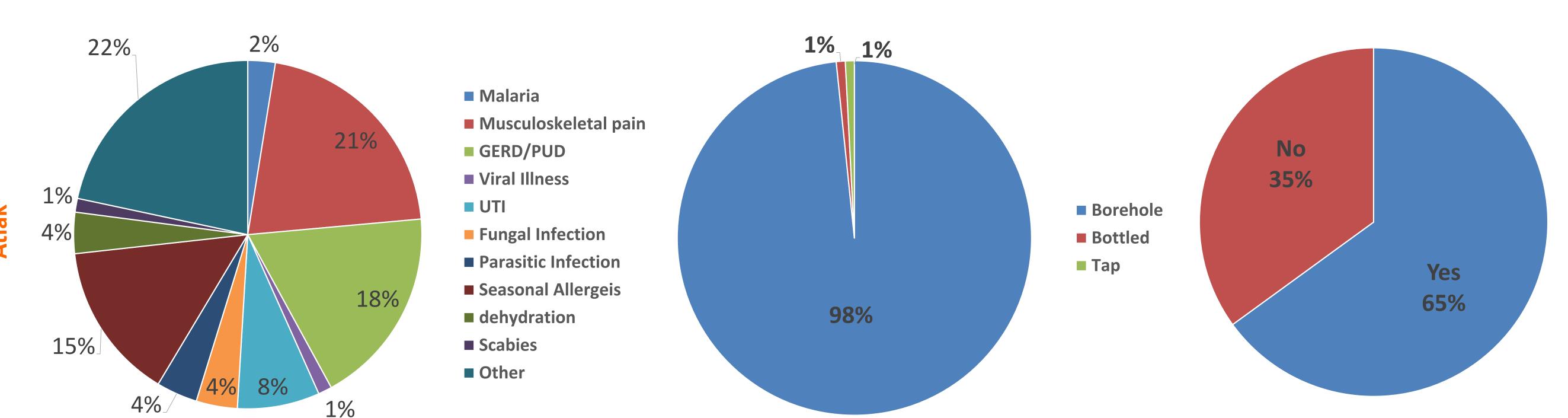
Saint Monica's clinic was created by Sister Rosemary to provide access to healthcare for the people of Gulu and surrounding areas. The clinic originally consisted of one building run by nursing staff. Today there is a clinic with multiple exam rooms and full staff, diagnostic laboratory, and independent birthing center. The clinic has capabilities for seeing pre and post partum women along with full vaccine capabilities for newborns. Currently there are three midwives staffing the birthing center along with a higher level provider for the clinic. While at Saint Monica's we saw a total of 239 patients. There are plans for future expansion of the lab and clinic, which are being built currently, along with a full time physician at the clinic.

Atiak is a small rural town in Northern Uganda that currently has a small one room clinic and birthing center. The birthing center has a large capacity and delivers around 70 babies a year. There is currently a new clinic being built that will service the northern region of Uganda with inpatient services, large pharmacy, and expanded clinic areas. This will be the only level 3 Center in northern Uganda and will greatly improve the health care in this region. We traveled to Atiak for two days while in Uganda and saw a total of 198 patients.

- Limitations to travel due to Ebola outbreak
- Language barriers and data capturing
- Water quality testing supplies and onsite resources

- 1. Ministry of Health of the Republic of Uganda, Health Sector Development Plan. Date accessed January 2, 2019.
- 2. WHO/UNICEF JMP Uganda Drinking Water Statistics Date accessed January 4,





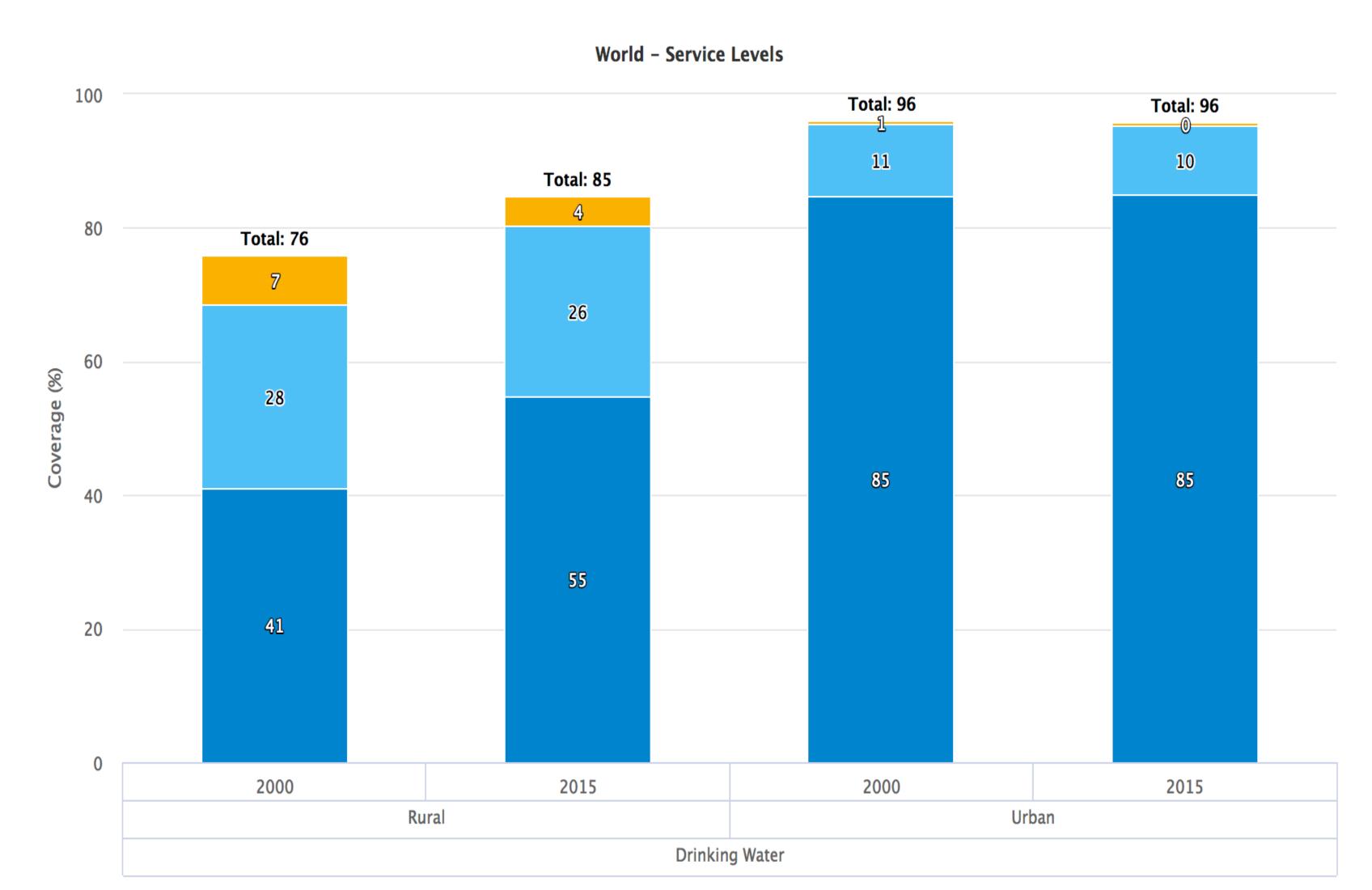
# **Uganda Health Statistics**

### Table 3: Top 25 causes of years of life lost in Uganda, and variations from 1990

Rank	Disorder	Years of Life Lost		
		Thousands of years lost	% of total	% change from 1990
2	Malaria	2257	14.20%	37
3	Lower Respiratory Infections	1004	6.40%	-53
4	Meningitis	838	5.30%	-8
5	Tuberculosis	706	4.50%	-1
6	Preterm birth complications	684	4.30%	40
7	Noenatal encephalopathy	692	4.40%	45
8	Neonatal sepsis	685	4.30%	52
9	Diarrheal diseases	537	3.40%	-74
10	Protein Energy Malnutrition	383	2.40%	-55
11	Road Injury	372	2.40%	98
12	Syphilis	347	2.20%	2
13	Maternal disorders	222	1.40%	16
14	Stroke	222	1.40%	36
15	Interpersonal violence	201	1.30%	148
16	Fire	206	1.30%	-6
17	Congenital anomalies	210	1.30%	-9
18	Cirrhosis	166	1.10%	54
19	Ischaemic Heart Disease	147	0.90%	39
20	Drowning	133	0.80%	36
21	Falls	133	0.80%	50
22	Epilepsy	132	0.80%	71
23	Self harm	97	0.60%	102
24	Measles	112	0.70%	-78
25	Diabetes	88	0.60%	108

Ugandan ministry of health, health sector development plans page 27 <sup>1</sup>

# Water sources in Uganda



The WHO and UNICEF monitor the number of individuals both in rural and urban Uganda for methods of obtaining water. This diagram demonstrates their findings. (orange – surface

water, light blue – basic water, dark blue - safely managed)

# Future Research & Educational efforts

- Our research allows for the global health program to provide the best care and education to the respective international site. As the global health program grows, expanding our research to new sites will allow for a better understanding of global health in general. We will be able to track disease patterns and adapt the aide and education we provide at each site.
- Bring over biomedical professional or student who can analyze water samples in real time to better understand the needs of purification at each site.
- Future education on water born illnesses and simple remedies:
  - Pamphlets or posters to leave at sites
  - Information to tell each patient or leave with home
  - Train local physicians or nurses to educate patients on need for clean water
- Education on antibiotic overuse and the repercussions:
  - Local provider education
  - Provide education pamphlets

### Discussion

According to our data, parasitic infections are still an issue plaguing the Ugandan people. Data from the WHO and UNICEF demonstrate that access to clean water is still a problem in both rural and urban Uganda. This is an ideal collaboration opportunity for the OSU Stillwater agricultural/engineering department in order to find a possible solution to this problem. The global health department can treat and educate the Ugandan people while the engineering and agricultural departments could provide a purification solution. Current technology could allow for better healthcare and quality of life for individuals if given appropriate resources.

Ugandan's initiatives to increase mosquito net usage, spraying, aggressively diagnose and treat malaria has decreased malaria cases and deaths. Our efforts have the potential for the same impact. Proper education and disbursements of resources will make a large impact on Ugandan health.

### Conclusion

The global health program at OSU is rapidly expanding and helping more patients around the world than it ever has. The best way to adapt how we approach these diverse locations is through knowing the population we serve. Our research allows for the best data to be gathered, and can be extrapolated to each OSU global health site. The data collected will give us direction as to how we can educate and provide resources to the people of Uganda on safe water consumption. It also sets up a potential partnerships with OSU and their agriculture or environmental engineering programs in order to remedy the unsafe water consumption in Uganda. The research we conducted in Uganda can be continued at all sites in the global health program which would allow for a better understanding of global health as a whole.

### **ACKNOWLEDGEMENTS**

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