

AFFORDABLE LIMBS FOR ALL (ALFA)

Oct 31, 2018







Supported by: WE HELP TWO (USA)

Background



- In August 2018 a house was rented in Matasia, outer Nairobi and a simple prosthetics workshop/ hostel set up. ALFA was starting!
- A prosthetist and housekeeper were employed.
- Limb parts were imported from China and socket fabrication materials sourced locally.

Paddy Mwenda , founder of Victory , clearing limb parts at Nairobi Customs





To mobilise neglected amputees of Kenya and fit with low- cost, quality limbs for a better life of mobility and opportunity.





BACKGROUND: Most Kenyan prosthetic workshops are not actively fitting quality, modern limbs that local people can afford to buy. The few centres that do make prostheses, such as PCEA in Nairobi offer ICRC(Red Cross) limbs at \$500 US per Above Knee limb (AK), and \$350 US for Below Knee limb (BK). Kenyatta Hospital Orthopaedic Hospital fits modern limbs using German parts but charge up to \$2000 US. Many government limb workshops do little fitting though they have the staff, good workshop tools and amputees in need. Their excuse is that they have no materials! This is common all over Africa at government orthopaedic workshops.

- NEED: There are many poor amputees all over Kenya needing prosthetic service where they can afford modern, affordable limbs, get treated with dignity and efficient service, and can return for followup adjustment and repairs or replacement of parts.
- ALFA (Affordable Limbs for All) is staffed and run totally by local Kenyans, to provide modern, lightweight and affordable prostheses to amputees for about \$200 per AK limb and \$150 per BK limb. Subsidies will be arranged for those who are poorer, or free, as we get sponsors! Each AK limb requires a socket made from epoxy resin or polypropylene, a rubber Sach foot in African colour, aluminium pylon and stainless steel adaptors and a knee joint plus suction valve.
- WORKSHOP: Few tools are needed to cast and fit quality limbs in a workshop that is effcient and modern. Prosthetists then will not waste time as they currently do in many workshops with old–fashioned materials and parts that produce heavy limbs that most amputees are not happy with.!

STARTUP







ALFA Team

Pascallia, Justina, Paddy, Johnson





Lynette, Emmanuel, Pascallia, Kefa **COMPONENTS:** MEND is the agent for a Chinese manufacturer and able to source quality Sach feet, aluminium pylons, knee joints, adaptors and callipers at prices @ 25% cost of European components. Sockets can be made using epoxy resin lamination or polypropylene single drape technology. The lamination technique requires almost no machinery and little cost when using locally-bought resin.

AFFORDABILITY: To keep the retail price of limbs affordable and within a target price of US \$150 for a modern BK limb and US \$250 for a modern AK limb. Some adjustment is made for use of single axis or 4 axis knee joint and various adaptors.





PARTS COST (not including shipping and tax)

BK KIT

- 4 prong socket adaptor/
- Tube clamp adaptor
- Short pylon
- Foot adaptor
- Sach foot in African colour

Total cost = \$40

AK KIT

- Polycentric knee joint (4 axis) or Single axis knee with lock
- 3 prong adaptor Socket adaptor
- Long pylon with integrated tube end, foot adaptor
- Sach foot

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Total cost= $100
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Some await their limbs





..to walk like John, age 15, from Narok, who developed osteomyelitis after plastering was poorly done on his leg









