

MUAC versus WHZ as admission in ATFC's

Session number 1

Saskia van der Kam
Médecins Sans Frontières

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Authors: S. van der Kam & Annick Lenglet & Christina Mach

Challenges admission criteria

- Weight-for-Height criteria of WHO (WHZ)
 - Gender specific criteria: Appropriate?
 - Suitable for all body shapes?
- Criteria for west Africa: WHZ of UNICEF (UNISEX)
 - What is the difference with WHZ?
- MUAC alone
 - Independent gender and body shape?
 - Who do we exclude?
 - Best cut off point?

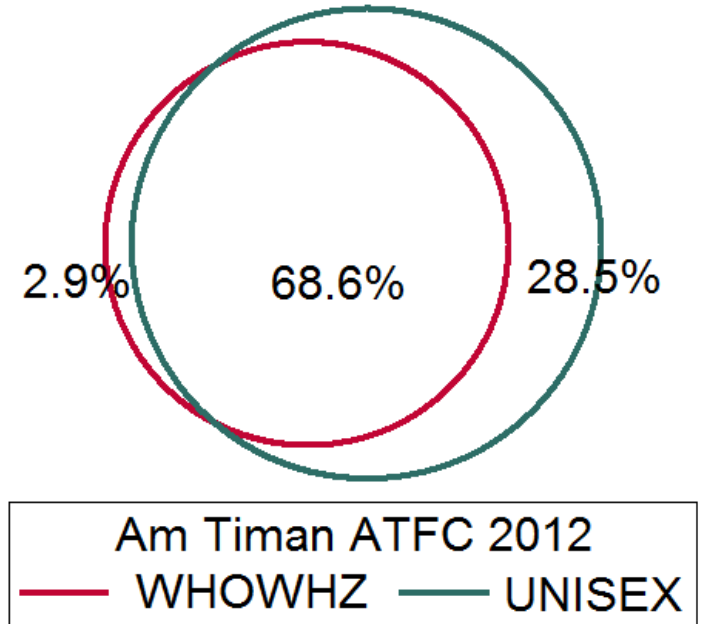
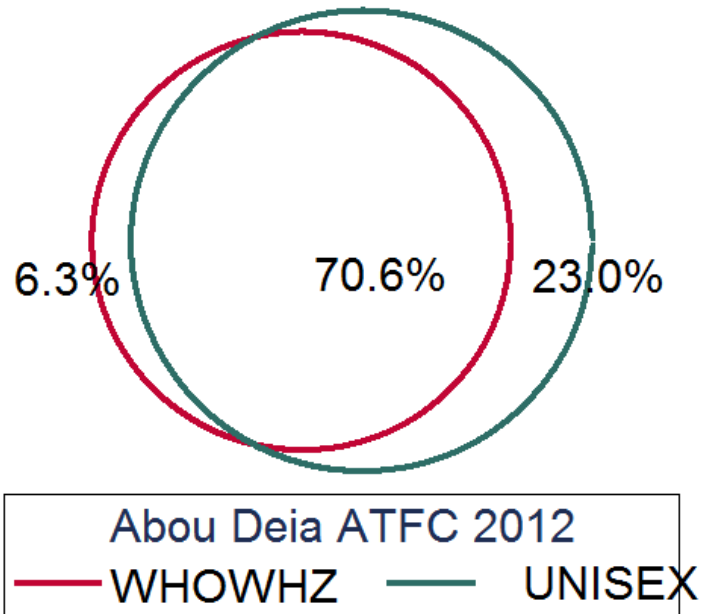
Analysis of ATFC OTP records

- Chad:
 - Am Timan WHZ, UNISEX
 - Abou Deia : WHZ, UNISEX and MUAC
- South Sudan:
 - WHZ, MUAC
- Analyzed :
 - Admission and Discharge profile
 - MUAC (all) compared to “excluded” WHZ or UNISEX

UNISEX vs WHZ; Chad % , n

	Abou Deia		Am Timan	
UNISEX excluded WHOWHZ	23.0 %	240	28.5 %	614
WHOWHZ excluded UNISEX	6.3 %	66	2.9 %	62
UNISEX and WHOWHZ	70.6 %	737	68.6 %	1478
Total	100 %	1043	100%	2154

UNISEX vs WHZ; Chad %



WHZ includes

76.9 % in Abou Deia

71.5% in Am Timan

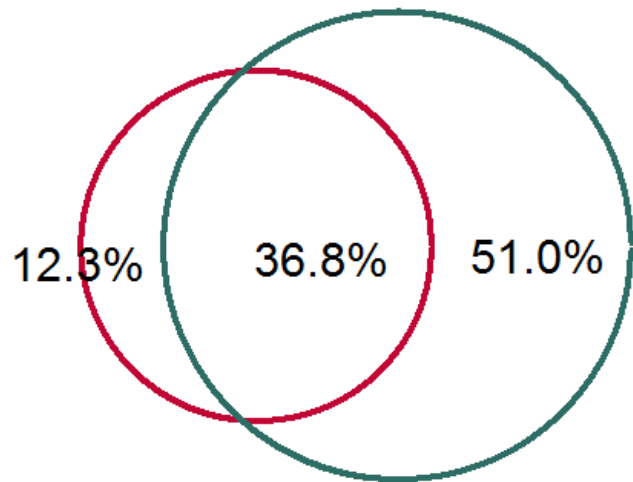
WHZ vs MUAC, Chad & SSudan

Admitted	MUAC <115 all		WHZ no MUAC<115		UNISEX no MUAC<115		n
Abou Deia; C	450	42.5%			610	57.5%	1060
Abou Deia; C	450	49.0%	466	51.0%			916
Bentiu; SS	557	25.1%	1665	74.9%			2222

When admitting on MUAC<115 only: 50-75% WHZ groups excluded

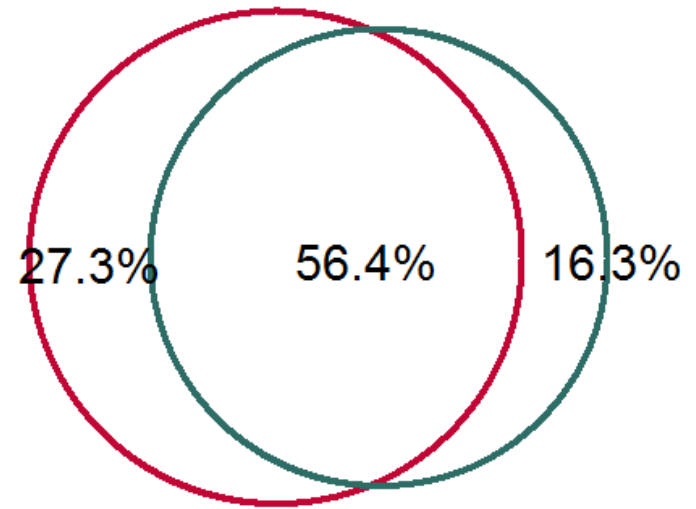
MUAC 115 and 121 vs WHZ

Admissions ATFC Abou Deia, Chad



Abou Deia ATFC 2012
— MUAC < 115 — WHZ

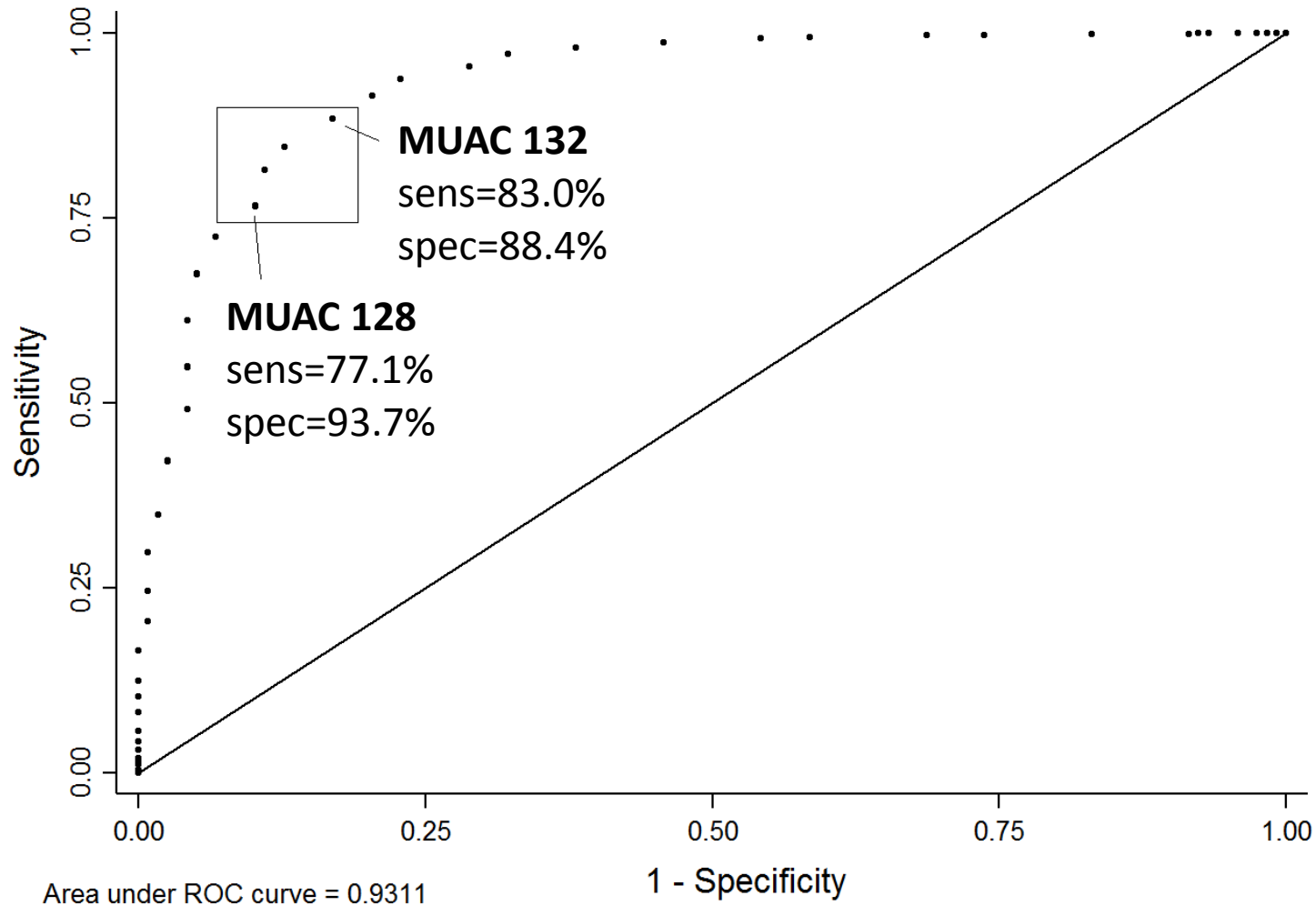
MUAC < 115
includes 49.1%



Abou Deia ATFC 2012
— MUAC < 121 — WHZ

MUAC < 121
includes 83.7%

Surveys : ROC WH<-3 vs MUAC *Chad*

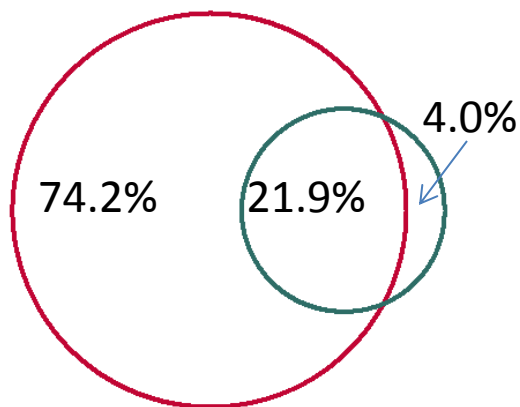


Source: Epicentre 2014

MUAC vs WHZ<-3

ATFC admissions Bentiu, South Sudan

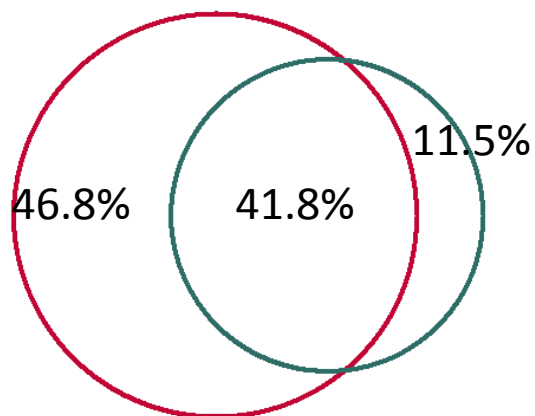
MUAC < 115



— WHZ<-3 — MUAC<115

MUAC < 115
includes 25.8%

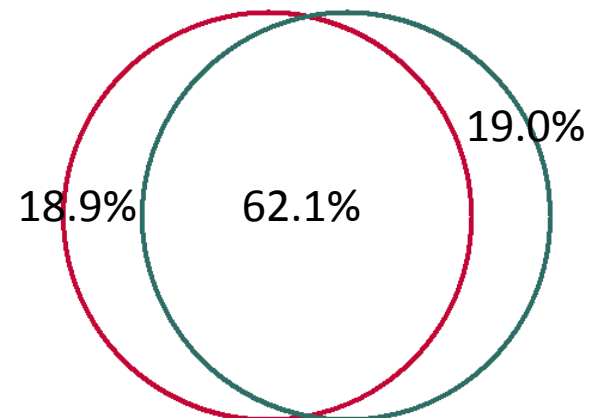
MUAC < 121



— WHZ<-3 — MUAC<121

MUAC < 121
includes 53.2%

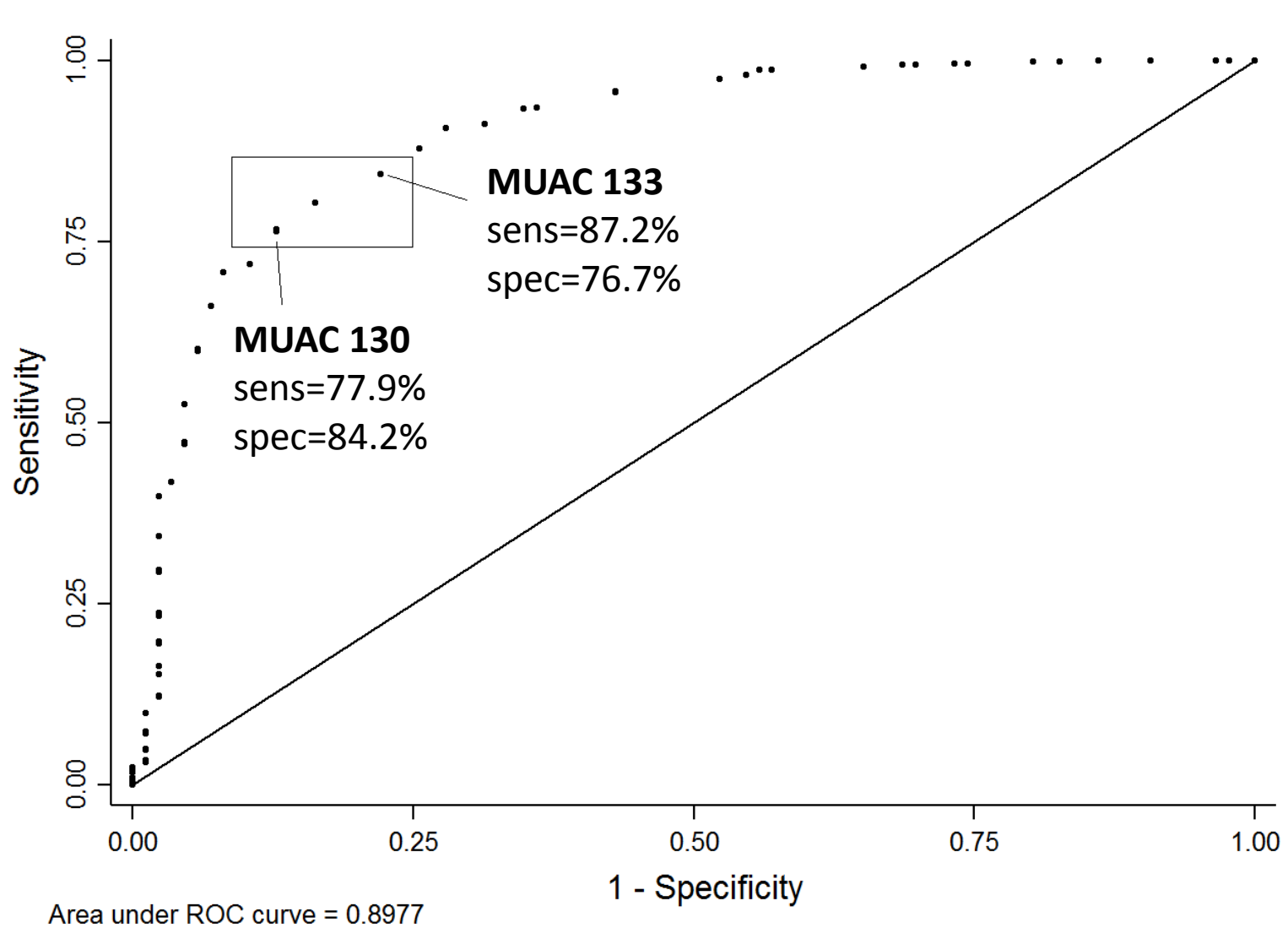
MUAC < 125



— WHZ<-3 — MUAC<125

MUAC < 125
includes 81.1%

Surveys : ROC WH<-3 vs MUAC Bentiu, SSudan



Source: Epicentre 2014

Gender by WHZ, UNISEX, MUAC

Abou Deia Chad: admission UNISEX and/or MUAC<115 and/or oedema

	WHZ all	UNISEX	MUAC <115	MUAC <121	
Male %	62.9	44.9	44.9	45.4	
Female %	37.1	55.1	55.1	54.6	

Bentiu, South Sudan: admission WHZ and/or MUAC<115 and/or oedema

	WHZ all		MUAC <115	MUAC <121	MUAC <125
Male %	61.5		47.1	50.8	53.4
Female %	37.1		52.8	49.2	46.6

Outcomes Abou Deia, Chad

	MUAC<115		WHZ no MUAC<115		MUAC≤120		WHZ no MUAC≤120	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Cured	78.9	355	79.8	372	78.7	728	82.8	148
Defaulter	10.7	48	6.2	29	8.9	82	7.0	11
Dead	1.1	5	0.6	3	1.0	9	0.7	0
Non responder	9.3	42	13.3	62	11.5	106	9.6	21
Total		450		466		925		180

Outcomes Bentiu South Sudan

	MUAC<115		WHZ no MUAC<115		MUAC<125		WHZ no MUAC≤125	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Cured	52.1	<i>289</i>	61.9	<i>988</i>	59.5	<i>1230</i>	68.9	<i>332</i>
Defaulter	29.6	<i>164</i>	24.2	<i>387</i>	25.8	<i>535</i>	18.7	<i>90</i>
Dead	0.2	<i>1</i>	0.1	<i>1</i>	0.1	<i>1</i>	0.2	<i>1</i>
Non responder	5.4	<i>30</i>	6.8	<i>108</i>	5.5	<i>113</i>	6.9	<i>33</i>
To ITFC	11.5	<i>64</i>	6.3	<i>100</i>	8.3	<i>172</i>	4.1	<i>20</i>
Other*	1.3	<i>7</i>	0.8	<i>13</i>	0.9	<i>18</i>	1.2	<i>6</i>
Total		<i>555</i>		<i>1597</i>		<i>2069</i>		<i>482</i>

Conclusions

- UNISEX vs WHZ 30% more admissions
- MUAC < 115 excludes 75% of all admissions (WHZ+MUAC)
- Best matching MUAC with WHZ < -3:
 - Chad <121
 - Ssudan <125
- Difficult to conclude something based on outcomes
- MUAC and UNISEX less gender sensitive vs WHZ

Discussion points

- Should WHZ be golden standard?
- Is UNISEX a better standard?
- Is MUAC better standard
- Is separation SAM vs MAM justified?
- Conclusion
- MUAC has preference :
 - simplicity ; increasing coverage
 - easy to adapt scale according context; eg emergency 125, static: 115
 - Gender neutral

Conclusion

- MUAC has preference :
 - simplicity ; increasing coverage
 - adapt scale; eg emergency 125, static: 115
 - Gender neutral