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WISN – Workload Indicators of Staffing Needs

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WISN – Workload Indicators of Staffing Needs – is a tool, developed by the World Health Organization (WHO), that is designed to calculate staff requirements according to health facility workload.

It relies on three components: available working time, activity standard and workload.

1) Available working time
is the number of days in a year a health worker can work in a facility (on average). It differs for different cadres. It is limited by annual leave, sickness, and other causes of absence such as travelling to District offices for meetings, to collect salaries and to delivery facility reports. On average, Iringa District Council and Ludewa District Council the available working time is 156 days for clinicians and 165 days for nurses.

2) Activity standard is the time required to perform each activity (clinical or support). For example, it takes 30 minutes for an antenatal visit. Activity standards are not fixed, but should be determined according to the specific setting.

3) Workload shows outputs of each facility. For example, the number of antenatal visits, child deliveries, vaccinations carried out in a month.

The sum of the time required per cadre to perform each activity (clinical and non-clinical) gives the requirement for each facility. *(table below)*.
This is matched against available working time, to obtain a WISN difference or ratio, which will tell us if there is shortage or surplus of staff.

Main limitations are the lack of reliable data from facilities, the difficulty of setting activity standards, and the incomplete overlap between population needs and volume of services being delivered.

Key facts
- WISN is a tool for human resources management.
- Available working time for each cadre is limited by absence due to leave, illness, national holidays, time spent travelling to central District medical offices or to collect salaries, which may be affected by means of transport and distances in rural areas.
- In Iringa DC and Ludewa DC, WISN has produced an available working time of **around 150 days per staff member**. Therefore to ensure the regularity of services in peripheral structures, such as full-time childbirh attendance, the minimum requirement is approximately 3 members of staff.
- The main criticism is that facility output may not reflect the **needs** of a population.

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Example of WISN calculation for one activity (antenatal visits) carried out by a midwife in a facility

Activity standard **30 min**

Workload component **200 visits/month**

30 X 200 = **6,000 min (100 hours)/month**
Time required by a midwife for antenatal visits in this facility

Madaktari wenza na Africa Cuamm
Viashiria kazi vya mahitaji ya wahudumu - WISN

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WISN – Viashiria kazi vya mahitaji ya wahudumu ni kifaa kilichoanzishwa na shirika la afya la kimataifa (WHO), ambacho kimebuniwa kwa lengo la kukokotoa mahitaji ya wahudumu kulingana na kazi ya huduma ya afya katika kituo. Kifaa hiki kina tegemea mambo matatu: muda uliopo wa kufanya kazi, kiwango cha shughuli na shughuli.

1) Muda uliopo wa kufanya kazi: idadi ya siku katika mwaka ambazo mhudumu wa afya anaweza kufanya katika kituo cha afya (wastani). Idadi hiyo hutofautiana kimakundi. Mpaka wake ni likizo za mwaka, ugonjwa na sababu nyingine za kushinda kama safari za wilayani kwa ajili ya mikutano, kufuata mishahara na kupeleka ripoti za vituo. Kwa wastani halmashauri ya wilaya ya Iringa na Ludewa ina muda wa siku 156 za kufanya kazi kwa wahudumu wa kliniki na siku 165 kwa wauguzi.
2) Kiwango cha shughuli: muda unaohitajika kufanya kazi ya kliniki au ya usaidizi. Kwa mfano, inachukua dakika 30 kumhudumia mjamzito

anayefika kliniki. Kiwango cha shughuli kinaweza kubadilika kulingana na eneo husika na kinapaswa kutafutwa kwa kigezo hicho.
3) Shughuli: matokeo ya kila kituo. Kwa mfano idadi wa wanaofika kliniki, uzalishaji na chanjo zinazotolewa kwa mwezi. Jumla ya muda unaotakiwa kwa kila kundi kufanya kila shughuli (za kliniki na zisizo za kliniki) inatoa mahitaji ya kila kituo kama inavyoonesha kwenye jedwali hapo chini. Hii inalinganishwa na muda uliopo wa kufanya kazi ili kupata tofauti katika WISN na uwiano ambao utatuambia kama kuna upungufu au zidio la wahudumu. Vikwazo vikubwa ni ukosefu wa takwimu sahihi kutoka kwenye vituo, ugumu katika kuweka kiwango cha shughuli na ulinganifu usio kamili kati ya mahitaji ya jamii na kiwango cha huduma zinazotolewa.

Mambo muhimu
- WISN ni kifaa kitumikacho kwa ajili ya usimamizi wa rasilimali watu
- Muda uliopo wa kufanya kazi kwa kila kundi la taaluma unakomea kwenye likizo, ugonjwa, mapumziko ya kitaifa, muda unaotumika kusafiri kwenda kwenye ofisi kuu za afya za wilaya kwa ajili ya kuchukua mishahara ambao huathiriwa na aina ya usafiri na umbali wa maeneo ya vijijini.
- Katika halmashauri ya wilaya ya Iringa na Ludewa, WISN imezalisha muda wa siku 150 za kufanya kazi kwa kila mfanyakazi. Kwahiyo, ili kuhakikisha kunakuwepo na huduma sawia katika maeneo ya mbali , kama kuwepo wakati wote kwa ajili ya huduma ya uzalishaji, idadi ya chini inayohitajika ya wahudumu ni 3
- Dosari kubwa ni kwamba matokeo ya vituo yanaweza kushindwa kuakisi mahitaji ya jamii
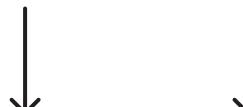
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Songea
Mtwara

Mfano wa namna ya kukokotoa kwa kutumia WISN katika shughuli Moja ya mahudhurio ya mjamzito yaliyofanywa Mkunga mmoja katika kituo kimoja cha afya

Kiwango cha shughuli Dakika 30

Sehemu ya kazi mahudhurio 200/mwezi

30 X 200 = **6.000 dakika**
Masaa 100/ mwezi
Muda unaohitajika na mkunga kumhudumia mjamzito anayehudhuria kwenye kituo

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Waraka huu umeandaliwa kwa msaada wa kifedha wa umoja wa ulaya. Yaliyomo ndani ya waraka huu ni wajibu wa madaktari wenza na Africa Cuamm na wala yasidhaniwe kuakisi kwa namna yoyote msimamo wa umoja wa ulaya.

Doctors with Africa Cuamm
GIS – Geographical Information System

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The majority of the population of Iringa District Council and Ludewa District Council, consisting of a total of about 400,000 people, live in rural villages. Women have to walk to the health facilities to give birth, though walking is sometimes combined with riding a bus. In Tanzania, where there are less than half the required number of health workers, the shortage of health staff is even greater in rural areas.

GIS – Geographic Information System – is designed to capture and display data located on a map. In Iringa DC and Ludewa DC this system has been used for planning purposes, analyzing geographic locations together with data on child deliveries and human resources. Neither district had any digital maps with details of the health care system. With the technical support of the Geology Department of the University of Siena, health facilities and population data were mapped using GIS, allowing access to child delivery services to be assessed in detail.

Results

Child delivery services are available in 57 health facilities in Ludewa DC and 70 in Iringa DC. Basic childbirth services are available in dispensaries and health centres, while complete delivery care, including caesarean sections and blood transfusions, are only available in one hospital in Iringa and in 2 hospitals in Ludewa. GIS has also shown that women can easily reach health facilities in both districts: for 90% the closest are located at a maximum walking distance of two hours, and more than half are within one hour's walking. In Iringa DC and Ludewa DC the Geographic Information System helped us to show that understaffing of qualified personnel, such as nurses and midwives, affects many facilities.
In Ludewa and Iringa, 93% and 87% of facilities respectively, have insufficient staffing to provide full time quality maternity care.

Key Facts

- Both Districts are **rural** and women get to health facilities mostly **on foot**.
- In both Districts, there are numerous health facilities for childbirth which are located at a maximum walking distance of two hours for the majority of women.
- The majority of health facilities have too few staff to ensure quality delivery care throughout the year.

Conclusions

For effective childbirth coverage, it is recommended a reduction of more than 40% of the centers in order to strengthen fewer, quality, well staffed delivery sites.
GIS can contribute to identifying these sites to ensure that women can still easily access facilities.

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Table 1 – Iringa DC: skilled birth attendants in Health facilities — *health facilities with insufficient staffing to offer quality full-time childbirth care

n. skilled birth attendants	0	1	2	3	>3
n. facilities	2*	29*	24*	7	8
% facilities	3%*	41%*	34%*	43%	11%
Total facilities	70				

Table 2 – Ludewa DC: skilled birth attendants in Health facilities — *health facilities with insufficient staffing to offer quality full-time childbirth care

n. skilled birth attendants	0	1	2	3	>3
n. facilities	21*	24*	6*	4	2
% facilities	37%*	42%*	11%*	1%	<1%
Total facilities	57				

Madaktari wenza na Africa Cuamm
Mfumo wa habari wa kijiografia – GIS

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Idadi kubwa ya wakazi wa halmashauri ya wilaya ya Iringa na Ludewa zenye jumla ya watu takribani 400,000 wanaishi vijijini. Akina mama wanalazimika kufuata huduma za afya kwa ajili ya uzazi kwa kutembea, na wakati mwingine huendesha basikeli au kupanda basi. Katika Tanzania ambako kuna upungufu wa watumishi wa afya karibu nusu ya mahitaji, upungufu huo ni mkubwa zaidi katika maeneo ya vijijini.

GIS – mfumo wa habari wa kijiografia umetengenezwa kuchukua na kuonyesha takwimu zilizopo kwenye ramani. Katika halmashauri ya wilaya ya Iringa na Ludewa mfumo huu umetumika kwa ajili ya kupanga na kuchanganua maeneo ya kijiografia na takwimu zihusuzo uzazi na rasilimali watu. Hakuna wilaya iliyokuwa na ramani za kidigitari zenye taarifa za kina kuhusiana na mfumo wa huduma za afya. Kwa msaada wa kitaalamu wa idara ya jiolojia ya chuo kikuuu cha Siena, vituo vya kutolea huduma za afya na takwimu za idadi viliwekwa kwenye ramani kwa kutumia mfumo wa GIS, na hivyo kutoa fursa ya kufanya tathmini ya kina ya huduma za uzazi.

Matokeo
Huduma za uzazi zinapatikana kwenye vituo 57 wilayani Ludewa na 70 katika halmashauri ya wilaya ya Iringa. Huduma za msingi za uzazi zinapatikana kwenye zahanati na vituo vya afya wakati huduma kamili za uzazi ikiwa ni pamoja na upasuaji na kuongeza damu hupatikana pekee kwenye hosipitali 1 ya Iringa na hosipitali 2 wilayani Ludewa. GIS imeonyesha pia kwamba akina mama wanaweza kuzifikia kirahisi huduma za afya katika wilaya zote mbili. Kwa asilimia 90 vituo vilivyo karibu vipo umbali wa kutembea kwa masaa mawili na vituo zaidi ya nusu vinafikika kwa mwenda wa saa moja. Katika halmashauri za wilaya ya Iringa na Ludewa mfumo wa habari wa kijiografia umetusaidia kuonyesha upungufu wa watumishi wenye sifa kama vile wauguzi na wakunga ulioathiri hosipitali nyingi. Katika wilaya ya Ludewa na Iringa asilimia 93 na 87 ya huduma za afya zina upungufu wa wahudumu wa kutoa huduma bora za akina mama kwa muda wote.

Mambo muhimu
- Wilaya zote mbili ni za vijijini na akina mama huzifikia huduma za afya kwa miguu
- Katika wilaya zote mbili kuna huduma za afya nyingi kwa ajili ya uzazi ambazo zipo umbali wa mwendo wa masaa mawili kwa akina mama wengi
- Idadi kubwa ya huduma za afya zina wahudumu wachache sana kwa ajili ya kutoa huduma bora ya uzazi kwa kipindi cha mwaka mzima

Hitimisho
Ili kuboresha maeneo ya kujifungulia watoto, inapendekezwa kupunguza vituo kwa 40% ili kuimarisha wachache, ubora, vizuri makatibu maeneo ya kujifungua. Mfumo wa kijiografia (GIS) unaweza kutusaidia kubainisha maeneo hayo ili kuhakikisha kwamba wanawake wanavifikia vituo hivyo kiurahisi.

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Jedwali 1 – Wilaya ya Iringa: Wahudumu wasaidizi Wenye ujuzi katika vituo vya afya — * Vituo vya afya vyenye upungufu wa wahudumu wa kutoa huduma bora ya uzazi Wakati wote

	0	1	2	3	>3
Idadi ya Wakunga wenye sifa					
Idadi ya Vituo	2*	29*	24*	7	8
% ya vituo	3%*	41%*	34%*	43%	11%
Jumla ya Vituo	70				

Jedwali 2 – Wilaya ta Ludewa: Wahudumu wasaidizi Wenye ujuzi katika vituo vya afya — Vituo vya afya vyenye upungufu wa wahudumu wa kutoa huduma bora ya uzazi Wakati wote

	0	1	2	3	>3
Idadi ya Wakunga wenye sifa					
Idadi ya Vituo	21*	24*	6*	4	2
% ya vituo	37%*	42%*	11%*	1%	<1%
Jumla ya Vituo	57				

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