

Job Satisfaction and Its Associated Factors Among Governmental Health Workers in West Shoa Zone, Oromia, Ethiopia

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Research

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25 **Abstract**

26 **Background:** Job satisfaction is an important determinant of workers' motivation, retention,
27 and performance. Each individual working in different segments of the health sector has an
28 impact on the quality and accessibility of the services the health care system provides to the
29 community. Many studies assessed health care workers' job satisfaction. However, the majority
30 of previous studies focused on specific health professionals and facilities. The present study
31 assessed job satisfaction and its associated factors among governmental health workers in West
32 Shoa Zone, Oromia, Ethiopia

33 **Methods:** An institutional-based cross-sectional study was conducted in West Shoa, Oromia
34 Regional State, Ethiopia, from March 23/2020 to April 15/2020. A total of 429 health workers
35 were identified from type A, B, and C districts. Participants were proportionally allocated for
36 each district and the individual participant was selected using simple random sampling methods.
37 Data was collected using a self-administered structured questionnaire and entered into EpiInfo 7.
38 Data analysis was done using SPSS version 22 software. Mean and/or median were used for
39 continuous variables, whereas; the percentage was used for categorical variables. Bivariate
40 logistic regression analysis was done to assess the association between each independent variable
41 and outcome variable. Multivariate binary logistic regression using adjusted odds ratios and 95%
42 confidence intervals were estimated to assess the strength of association.

43 **Results:** From the total of 429 study participants, 422 of them were fully responded to the
44 survey with a response rate of 98.3%. The overall level of job satisfaction was 46%.
45 Management. The policy of the worker organization [AOR 0.07, 95% CI: 0.03-.21], the
46 relationship among the workers [AOR 0.08(95% CI .03-.23], presence of benefit package [AOR
47 0.07, (95% CI .02-.22], work environment [AOR 0.11, (95% CI: 0. 04-.31], personal growth and
48 development [AOR 0.11 (95% CI: 0.04-.33], supportive supervision from immediate supervisor
49 [AOR 0.04 (95% CI: 0.014-.14] and the nature of work category [AOR 0.03 (95% CI: 0.01-.1)
50 were independently associated with job satisfaction.

51 **Conclusions:** The overall job satisfaction of health workers in the study area was low.
52 Management and policy of the worker organization, the relationship among the workers,

53 presence of benefit package, work conditioning, personal growth, and development, supportive
54 supervision from immediate supervisor and the nature of work category were among the
55 predictor of job satisfaction.

56 Key Words: Health Workers, Job satisfaction, West Shoa, Ethiopia

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77 **Introduction**

78 Job satisfaction is defined as the degree to which individuals feel positive or negative about their
79 jobs [1]. Health care systems can only function with health workers. Improving health service
80 coverage and realizing the right to the enjoyment of the highest attainable standard of health is
81 dependent on their availability, accessibility, acceptability, and quality of health care
82 professionals. It is not only the availability, but also equitably distribution and accessibility by
83 the population, possession of the required competency, motivation, and empowerment to deliver
84 quality care that is appropriate and acceptable to the population is among the other factors
85 required for effective and efficient delivery of health care[2]. However, countries at all levels of
86 socioeconomic development face, to varying degrees, difficulties in the education, deployment,
87 retention, and performance of their workforce[3].

88 Job satisfaction among health-care professionals acquires significance for maximization of
89 human resource potential and it is an important determinant of health staff's motivation,
90 retention, and performance[1]. Despite a high disease burden in most African countries, the
91 provision of healthcare services is largely inadequate and ineffective. Possible reasons include
92 challenges related to leadership and governance, health workforce, medical products,
93 technologies, financing, and services delivery[4]. The shortage of health care workers in
94 particular is a major cause for concern among other factors. Inadequate human resources are a
95 major constraint to improving global health. The health sector is characterized by a high turnover
96 coupled with internal as well as external brain drain. For instance, a study conducted in
97 Tanzania, Malawi, and South Africa showed that 18.8% of health workers in Tanzania, 26.5% in
98 Malawi, and 41.4% in South Africa indicated that they were actively seeking employment
99 elsewhere[3].

100 Job satisfaction is affected by many factors and varies from country to country. In Nigeria, age,
101 marital status, profession, and location of health facility, duration of work played vital roles in
102 level of satisfaction of primary health care workers [5]. Strong leadership style is probably the
103 reason why nurses in Nigeria are more satisfied with their jobs when compared with their
104 colleagues in other countries even though they may work for longer hours or earn relatively less
105 salaries[6]. Moreover, factors related to the work environment, low payment, poor working

106 conditions, limited educational and career opportunities, unsafe workplaces, and a lack of
107 resources for effective working were reported from different parts of the world [4, 7-10].

108 Ethiopia, as with many other sub-Saharan African countries, also faces shortages in skilled
109 health professionals [11]. Geographical imbalances in workforce staffing, increasing attrition
110 rates, workforce shortage, and failures in employing professionals at the right time, retaining
111 them, managing them, and budget shortages with irregular continuing education have critically
112 affected the Ethiopian health system. Even though the government is making substantial
113 programs toward increasing the number, category, and quality of health workers and health
114 infrastructure, worker migration from the public health sector more importantly remains the
115 challenge for the sector. Various factors accelerated and resulted in the migration of health
116 professionals. Salary and incentives, recognition by management, developmental opportunities,
117 and patient appreciation were strong predictors of job satisfaction in west Ethiopia [12]. Another
118 study conducted in Eastern Amhara Region identified the presence of health professionals'
119 reference manual/guide, alcohol drinking, workload, experience, educational status, and
120 profession types were identified as important predictors for job satisfaction [13]. Health workers
121 of public hospitals of West Shoa were dissatisfaction with the hospital bureaucratic management
122 style [9]. Similarly, a study of the Gondar Referral Hospital, Northwest Ethiopia, showed
123 dissatisfaction of the workers with leadership style and provided supportive supervision [14].
124 There is a variation in factors affecting job satisfaction of health care workers based on the level
125 of health facility and location. Therefore, the present study assessed the level of job satisfaction
126 of health care workers working in the primary health care system west Shoa.

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133 **METHODS**

134 **STUDY AREA AND PERIOD**

135 The study was conducted in West Shoa, Oromia Regional State, Ethiopia, from March 23/2020
136 to April 15/2020. West Shoa Zone is one of the 22 zones of Oromia Regional State. Ambo, the
137 capital of the zone, is located 114km west of Addis Ababa. The total estimated population of the
138 zone was 2,756, 250. West Shoa Zone has 22 districts. The health facility of the zone includes;
139 91 health centers, 1 Referral hospital, 3 General Hospitals, 4 District Hospitals, and 520 Health
140 Posts. 2795 various health professionals are working in the zone. 1054 supportive staff are also
141 included in the health care system of the zone. There are 995 health workers and 452 supportive
142 staff currently working in the selected study areas namely; Abuna Gindebaret, Ambo, Nono, Dano, Ilu
143 Galan, Jibat, Calia, and Dire Enchini District Health Sector.

144 **STUDY DESIGN**

145 An institutional-based cross-sectional design was used.

146 **SAMPLE SIZE DETERMINATION**

147 The sample size was determined by using single population proportion formula.

148
$$n = \frac{(Z \alpha/2)^2 p (1-p)}{d^2}$$

149 Where: - n = is calculated sample size

150 ➤ Z = Confidence interval [95%]

151 ➤ d² = marginal of error [5%]

152 ➤ p = proportion of workers satisfied. 38.9% was taken from the finding of a study
153 done on factors associated with job satisfaction among Governmental Health Workers
154 in Sebata Hawas District, Oromia Region [15].

155 ➤
$$n = \frac{1.96^2 \times 0.389 \times 0.611}{0.05^2} = \frac{3.8416 \times 0.389 \times 0.611}{0.0025}$$

156 = 0.913 = 365

157 0.0025

158 After adding 10% non-response the total sample =402

161 By using finite population correction formula, (since sample size n to the population size N is
162 greater than 5%), we need to use the formula with finite population correction as follows:

$$\begin{aligned} 163 \quad N_f &= \frac{n}{(1 + n/N)} \\ 164 & \\ 165 \quad &= \frac{402}{1 + 402/995} = 286 \\ 166 & \end{aligned}$$

167 Where:-

- 168 ➤ n = is calculated sample size
- 169 ➤ N_f = Final sample size
- 170 ➤ N = is source population (all health workers currently working in Abuna Gindebaret,
171 Ambo, Nono, Dano, Ilu Galan, Jibat, Calia and Dire Enchini)

172 The sample size is 286 Workers, considering design effect correction 1.5 % the final sample size
173 is 429 workers.

174 **SAMPLING TECHNIQUE**

175 Districts in West Shoa Zone were stratified into type A, type B, and type C districts by Oromia
176 Regional Health Bureau district classification (based on the availability of infrastructures and
177 distance from center). Using simple random sampling methods and proportionally,
178 representatives of each district were selected from each stratum. Then the total sample was
179 proportionally allocated to all selected districts under each stratum. Finally, the study participants
180 were selected by a simple random sampling method from listed health workers of the selected
181 district (figure 1).

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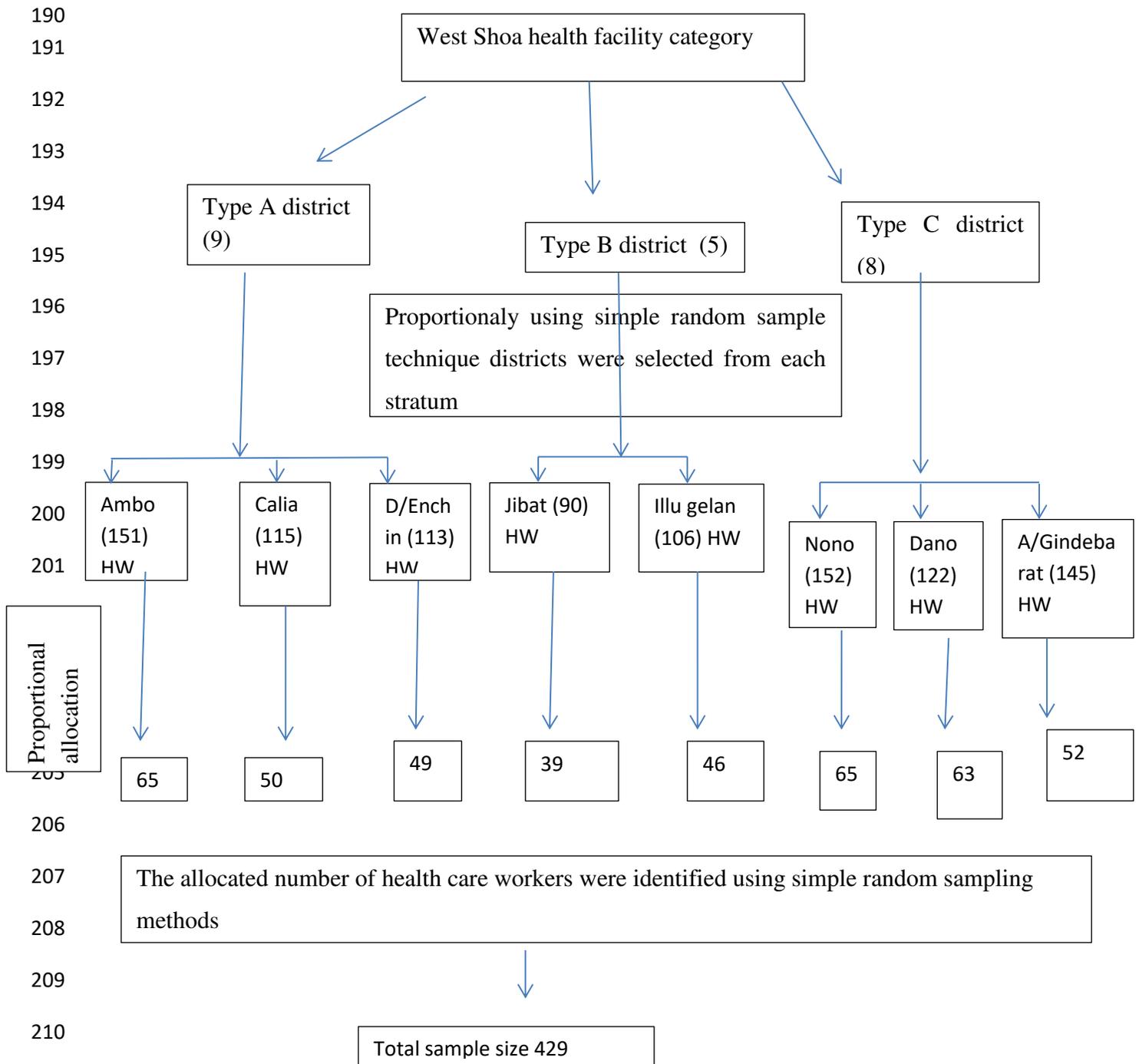


Figure 1 Sampling Procedures among health workers toward factors affecting health workers Job satisfaction in West Shoa, Oromia 2020 (n=429)

214 **DATA COLLECTION TOOL AND TECHNIQUES**

215 Data were collected by using a Likert scale, structured, and a self-administered questionnaire
216 developed from different literature (supplementary material 1). The developed questionnaire was
217 prepared in English and translated to Afaan Oromoo (the local language). Data were collected
218 by four trained and experienced diplomas nurse graduates who were not working in the study
219 district during data collection.

220 **DATA QUALITY CONTROL AND MANAGEMENT**

221 To ensure the quality of data, data collectors and supervisors received one-day training on the
222 objective, ethical issues, data collection instrument, and data collection procedure. Every day
223 each completed questionnaire was checked for completeness by the supervisor. The collected
224 data through self-administered questionnaires were checked for completeness and consistency
225 during entry into a computer.

226 **DATA ANALYSIS AND PROCESSING**

227 Data were cleaned, coded, and entered into Epi-Info software Version 7 and exported to SPSS
228 Version 22. Mean and median were used for continuous variables, whereas; the percentage was
229 used for categorical variables. Descriptive results were presented using tables and figures.
230 Cronbach's coefficient alpha was used as a measure of the internal consistency of Statistics.
231 Cronbach's alpha values greater than 0.7 were regarded as acceptable. Crude odds ratios with
232 their 95% confidence intervals were estimated in the bivariate logistic regression analysis to
233 assess the association between each independent variable and outcome variable. Finally, all of
234 the variables with a p-value <0.25 with health professionals' job satisfaction scores in bivariate
235 linear regression analyses were entered into a multiple regression model. Multivariate binary
236 logistic regression using adjusted odds ratios and 95% confidence intervals were estimated to
237 assess the strength of association, and variables with P-value < 0.05 were considered statistically
238 significant.

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242 **RESULTS**

243 **SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS**

244 A total of 429 health workers were provided the self-administered questionnaire and 422 (98.4%)
 245 respondents completed and returned the questionnaires. Among the respondents 227 (53.8%)
 246 were males. Regarding the age of respondents, 77 (18.3 %) were less than 25 years, 204 (48.3%)
 247 were 25-29 years and 141 (33.4%) were above 30 years. The mean age of the respondents was
 248 32.99 (± 6.112) years. Three fourth 311 (73.7%) of the study participants were married and 286
 249 (67.8%) of the study respondents were Protestant Christianity followers. The educational status
 250 of the participants has the following pattern; 78 (18.5%) were Diploma/10+3 holder, 206
 251 (48.8%) were level IV and 138 (32.7%) were Degree and above. Professionally, 113 (26.8%)
 252 were Nurses, 101 (23.9%) were health extension workers, and 55 (13%) health officer. Majority
 253 280 (84.8%) working place of respondents had access to winter and summer road and 64
 254 (15.2%) had only winter road. Electric was the main source of energy among the two-third of the
 255 workers (Table 1).

256

257 Table 1 Socio-Demographic Characteristics of Health Workers of West Showa Zone, Oromia,
 258 March, 23- April 15, 2020 (n=422)

Socio-demographic characteristics		Frequency	Percent (%)
Sex	Male	227	53.8
	Female	195	46.2
Age category (Mean age 32.96 ± 6.11 years)	<25 years	77	18.3
	25-29 years	204	48.3
	30+ years	141	33.4
Educational level	Diploma/10+3	78	18.5
	Level IV	206	48.8
	Degree & above	138	32.7
Marital Status	Married	311	73.7
	Divorced	6	1.4
	Unmarried	105	24.9

Religion	Ethiopian Orthodox	109	25.8
	Protestant	286	67.8
	Muslim	12	2.8
	Other **	15	3.6
Salary category	≤ 2800	72	17.1
	2801-4000	87	20.6
	4001 and above	263	62.3
Experience category	<5 years	117	27.7
	5-9 years	167	39.6
	>= 10 years	138	32.7
Profession	Nurse/Clinical or Public	113	26.8
	Midwifery	41	9.7
	Druggist/Pharmacist	40	9.5
	Health officer	55	13.0
	Laboratory technician/Technologist	23	5.5
	Environmental Health/Sanitary	22	5.2
	HEWS/Rural or Urban	101	23.9
	Other*	27	6.4
Types of District	Type A	149	35.3
	Type B	89	21.1
	Type C	184	43.6
Place of Work	District Health Office	90	21.3
	Health center	236	55.9
	Health Post	96	22.7
Site of work	Urban	204	48.3
	Rural	218	51.7
Accessibility of road	Winter and summer road	358	84.8
	Winter road only	64	15.2
Source of Energy	Electric	280	66.4

	Wood &/or Charcoal	81	19.2
	Solar/ Kerosene	61	14.5

259 * MPH, Biology, Biomedical, Sociology, Psychology

260 ** Waaqeffataa, Catholic, Adventist.

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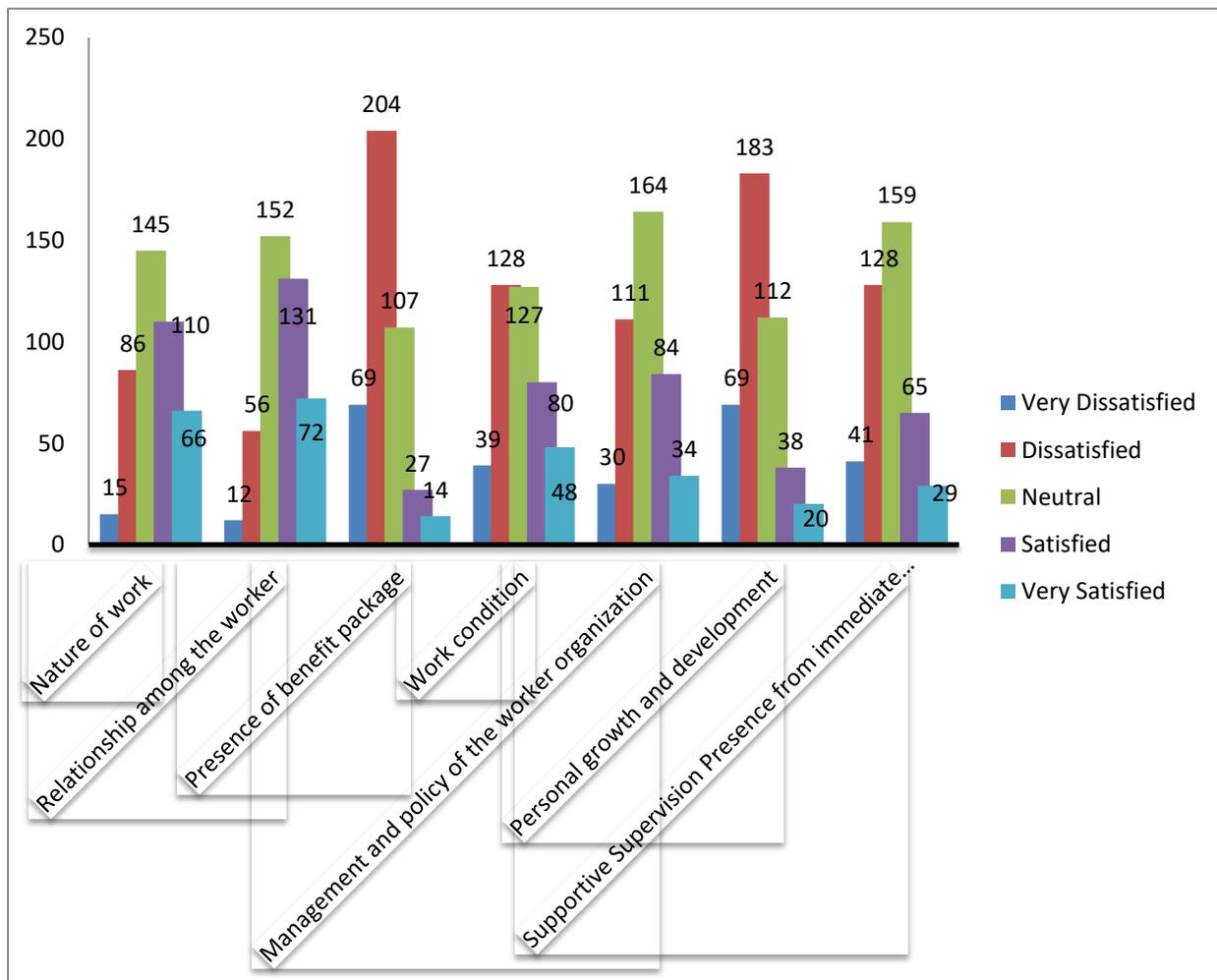
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263 **LEVEL OF JOB SATISFACTION**

264 The overall level of job satisfaction of the West Shoa health workers was 46%. Females were
 265 more satisfied(49.7%) with their job compared to males (43.2%). The level of satisfaction drop

266 as the age of the respondents' increases; under 25 years was 59.7% satisfied, whereas, the age
 267 group of greater than 30 years respondents 56% of them were dissatisfied with their current job.

268 The highest proportion of the study participants were dissatisfied with the absence of benefit
 269 packages and personal growth and development (figure 2).



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 272 Figure 2: Job satisfaction data of Health Workers of West Shoa Zone, Oromia, March, 23- April
 273 15, 2020 (n=422)

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277 **FACTORS ASSOCIATED WITH JOB SATISFACTION**

278 A multivariable binary logistic regression analysis was done to rule out factors associated with
 279 job satisfaction of health care workers. Twelve factors were found to be significantly associated
 280 with job satisfaction. These are age, educational level, work experience, road accessibility,
 281 energy source, nature of the work, the relationship between workers, work environment, a
 282 benefits package, management policy, personal development, and supportive supervision.

283

284 Respondents whose ages below 25 years were 1.89 times greater (COR 1.89 CI of 95% 1.08-3.22)
 285 were satisfied than health workers whose ages were 30 and above. Diploma holders were 2.22
 286 times more satisfied with their job compared to those with a degree and above education levels
 287 [COR: 2.22; (CI of 95% 1.26-3.91)]. Health workers who have below 5 years of work
 288 experience were satisfied with their job 1.83 times (CI of 95% 1.11-3.01) greater than those who
 289 served more than 10 years and above. Health workers who considered there is no participatory
 290 management and policy at their worker organization were 0.09 times less likely to satisfy with
 291 their job than those considered, there is participatory management & policy [AOR 0.09, 95%
 292 CI .04-.242]. Respondents who considered there is no good relationship among health workers
 293 were 0.05 times less likely to be satisfied with their job than those who accept that there is a
 294 good interpersonal relationship among health workers [AOR 0.05, 95% CI .02- .12]. Health
 295 workers who said there are no benefit packages in their organization were 89% less to be
 296 satisfied with their job compared to their counterpart [AOR 0.11, 95% CI .04-.28]. Those
 297 respondents who said their no attractive work environment were 0.14 times less likely to be
 298 satisfied with their job than those who said there is an attractive working condition [AOR 0.14,
 299 95% CI .06-.33]. Study participants who believe there no personal growth and development were
 300 0.12 times less satisfied than those who believe there are personal growth and development
 301 [AOR 0.12, 95% CI 0.07-.43]. Supportive supervision was one of the factors that affect worker
 302 job satisfaction; those who did not receive supervision were 94% less satisfied than those who
 303 received supportive supervision from an immediate supervisor [AOR 0.06,95% CI .02-.154].

304
 305 The nature of the is also associated with workers' satisfaction. work who were not attracted by
 306 the nature of the work was 95% less satisfied with their job than those who said there is attractive
 307 nature of work [AOR 0.05, 95% CI .02- .12]. (Table 2). Sex, profession, type of district, and
 308 place of work were not associated with the satisfaction of health workers in the study area.

309

310 Table 2 Bivariate & Multivariate binary logistic regression for Job Satisfaction Analysis of
 311 Health Workers of West Showa Zone, Oromia, March, 23- April 15, 2020 (n=422)

Covariate	Job Satisfaction level		COR (CI 95%)	AOR (CI 95%)
	Satisfied N (%)	Dissatisfied N (%)		

Age	<25 years	46(59.7)	31(40.3)	1.89 (1.08-.32)	.51(.07-3.68)
	25-29 years	87(42.6)	117(57.4)	.95 (.61-1.46)	.19(.04-.85)*
	30+ years	62(44)	79(56)	1.00	1.00
Sex	Male	98(43.2)	129(56.8)	.77(.52-1.13)	2.28(.75-6.9)
	Female	97(49.7)	98(50.2)	1.00	1.00
Marital status	Married	137(44)	174(56)	.72 (.46-1.12)	.41(.12-1.36)
	Divorced	3(50)	3(50)	.909(.18-4.71)	.35(.01-10.37)
	Unmarried	55(52.4)	50(47.6)	1.00	1.00
The educational level	Diploma/10+3	47(60.3)	31(39.7)	2.22 (1.26-3.9)	5.8(1.18-28.6)*
	Level IV	92(44.7)	114(55.3)	1.18 (.76-1.8)	1.65(.51-5.38)
	Degree & above	56(40.6)	82(59.4)	1.00	1.00
Profession of Respondents	Nurse	50(42.3)	63(55.7)	1	1
	Midwifery	20(48.8)	21(51.2)	1.2(.59-2.46)	.15(.02-.99)
	Druggist/ Pharmacist	17(42.5)	23(57.5)	.93(.45-1.93)	.54(.06-4.67)
	Health officer	17(30.9)	38(60.1)	.56(.29-1.12)	.19(.03-1.24)
	MLT**	11(47.8)	12(52.2)	1.2(.47-2.84)	2.18(.19-24.93)
	Environmental Health	7(31.8)	15(68.2)	.59(.22-1.55)	.7(.06-8.54)
	HEWs	61(60.4)	40(39.6)	1.9(1.1-3.3)	.78(.11-5.74)
	MPH, Biology, Biomedical, Sociology	12(44.4)	15(55.6)	1.01(.43-2.4)	.68(.09-4.91)
Work experience	<5 years	65(55.6)	52(44.4)	1.83 (1.11-3)	4.5(.87-23.41)
	5-9 years	74(44.3)	93(55.7)	1.17(.74-1.84)	3.75(1.1-12.7)*
	>= 10 years	56(40.6)	82(59.4)	1.00	1.00
Salary	<=2800	42(58.3)	30(41.7)	1.95(1.15-3.3)	2.95(.51-16.9)
	2801-4000	43(49.4)	44(50.6)	1.36(.84-2.21)	.31(.08-1.19)
	>=4001	110(41.8)	153(58.2)	1.00	1.00
Type of District	Type A	64(43)	85(57)	.92(.59-1.42)	1.54(.4-5.9)
	Type B	48(54)	41(46)	1.43(.86-2.37)	1.1(.26-4.71)
	Type C	83(45)	101(55)	1.00	1.00
Place of Work of Respondents	District Health Office	34(37.8)	56(62.2)	.38 (.21-.69)	2.659(.05-43)
	Health center	102(43.2)	134(56.8)	.48 (.29-.78)	6.49(.19-218)
	Health Post	59(61.5)	37(38.5)	1.00	1.00
Site of work of respondents	Urban	80(39.2)	124(60.8)	.58 (.39-.85)	.41(.14-1.19)
	Rural	115(52.8)	103(47.2)	1.00	1.00
Road accessibility respondents workplace	Winter & summer	171(47.8)	187(52.2)	1.52(.88-2.63)	5.9(1.16-30.2)*
	Winter road only	24(37.5)	40(62.5)	1.00	1.00
Energy source	Electric	127(45.4)	153(54.6)	1.28(.73-2.25)	8.1(1.71-38.2)*
	Wood &/or	44(54.3)	37(45.7)	1.83 (.93-3.6)	7.87(1.27- 49)*

	Charcoal				
	Solar/ Kerosene	24(39.3)	37(60.7)	1.00	1.00
Nature of work	Unfavorable	41(19.3)	171(80.7)	.09 (.06-.14)	.03(0.01- 0.1)*
	Favorable	154(73.3)	56(26.7)	1.00	1.00
The relationship between the	Not Good	47(22.9)	158(77.1)	.139(.09-.21)	.08(.03-.23)*
	Good	148(68.2)	69(31.8)	1.00	1.00
Presence of benefit package	No	64(27.5)	169(72.5)	.11 (.07-.17)	.07(.02-.22)*
	Yes	131(69.3)	58 (30.7)	1.00	1.00
Work environment	Not attractive	55(23.6)	178(76.4)	.08 (.05-.13)	.11(.04-.31)*
	Attractive	140(74.1)	49(25.9)	1.00	1.00
Management and policy of the worker organization	Not participatory	29(15.6)	157(84.4)	.14 (.09-.21)	.07(.03-.21)*
	Participatory	166(70.3)	70(29.7)	1.00	1.00
Personal growth and development	Not present	53(22.9)	178(77.1)	.14 (.09-.21)	.11(.04-.33)*
	Present	142(74.3)	49(25.7)	1.00	1.00
Supportive Supervision Presence from immediate supervisor	Not present	38(17.3)	182(82.7)	.06 (.04-.097)	.04(.014-.14)*
	Present	157(77.7)	45(22.3)	1.00	1.00

312 * P-value <0.05, **MLT- Medical laboratory technician/ technologist

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325 **DISCUSSION**

326 The job satisfaction of the worker is a vital component of any organization. Similarly, health care
327 function when it upholds the satisfaction level of health workers [16]. The previous study
328 conducted in West Shoa to assess factors associated with job satisfaction of health workers
329 identified hospital bureaucratic management style as a determinant factor for job satisfaction [9].
330 However, the study included only health workers in public hospitals. The present study assessed
331 the level of job satisfaction and its associated factors among governmental health workers in
332 West Shoa Zone, Oromia, Ethiopia but excluded hospitals.

333
334 The result of this study showed the overall level of job satisfaction of the health worker was
335 46%, (95% CI: 41.5-50.7). It is lower than that of South Africa where 52.1% of health workers
336 satisfied with their job [3] and higher than Horo Guduru Wallaga Ethiopia, which was 41.46%
337 [17]. This result is very low when compared to the results of the study conducted in
338 Northwestern Nigeria where 90.4% of health workers satisfied [18] and Malawi and Tanzania
339 which is 71% and 82.6% level of job satisfaction respectively [3]. The variation might happen
340 due to differences in leadership style, the health system of the countries, infrastructure, study
341 area, and composition of the study participants. The result is higher when compared to the result
342 of the study conducted in eastern Ethiopia with 38.5% overall of job satisfaction [19] and, in
343 Sabata Hawas with a 38.9% satisfaction level [15]. A previous study conducted in a similar area
344 but only on public Hospitals had 34.9 % satisfaction [9]. The difference might be due to the
345 study participant composition and study area.

346
347 Age, educational level, work experience, road accessibility, energy source, nature of the work,
348 the relationship between workers, work environment, a benefits package, management policy,
349 personal development, and supportive supervision were found to be associated with job
350 dissatisfaction. Similarly, studies conducted in, rural health workers in western China, Horo
351 Guduru Walaga and West Shoa, salary and incentives, recognition by management,
352 developmental opportunities, poor payment scheme, lack of training opportunity, management
353 style, poor working conditions, age of respondents, and level of education and participation in
354 decision making were found to be significantly associated with job satisfaction [9, 17, 20].

355

356 The findings showed that the satisfaction level of health workers was decreased with increase in
357 age. The result is similar to the study done in eastern Ethiopia [19]. Educationally, diploma
358 holders were more satisfied with their work than degree holders. This result is contradictory to
359 the results of the previous study done in Ethiopia [13]. An increase in age and improvement of
360 academic status increases health workers' expectations; better incentive, and personnel growth.
361 However, the majority of the participants in this study who have longer work experience and
362 degrees were working in similar settings with the workers of lower status in terms of work
363 experience and academic status.

364
365 Most factors associated with the health workers' job dissatisfaction are associated with the
366 management system of the health institutions. Lack of supportive supervision, non-participatory
367 nature of the management system, and absence of an incentive scheme. Similarly, studies from
368 Harari, Ethiopia, China, and Serbia identified those factors related to the management of human
369 resources as a determinant factor for job satisfaction [20-22].

370
371 Another determinant factor for the satisfaction of health workers is the work environment-
372 related. These include the smooth relationship among the workers, supply of energy at the
373 workplace, and road accessibility. These findings are similar to those of a study conducted in
374 Pakistan where the professionals were dissatisfied with a poor work environment condition [23].
375 However, in this study type of the district is not linked to job dissatisfaction. Furthermore, socio-
376 demographic characteristics; marital status, sex, and profession were not significantly associated
377 with job satisfaction which similar to other studies done in India and Pakistan [24, 25].

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387 **CONCLUSIONS**

388 The study revealed the health care workers' job satisfaction in the study area is generally low.
389 There was no significant association between socio-demographic variables like sex and marital
390 status; and educational level. However, job-related factors such as the nature of work,
391 interpersonal relationships; managerial related factors such as participation in decision making,
392 and supportive supervision; benefits package; personal growth, and developmental opportunities
393 were significantly associated with job satisfaction of health workers. Improving the work
394 environment and the human resource management system of health facilities is warranted.
395 Furthermore, instituting benefit package and access for professional development for the
396 improvement of job satisfaction should be considered.

397

398 **Declarations**

399 **Ethics approval and consent to participate**

400 An official letter from Rift Valley University to conduct the research was submitted to the
401 working place of study participants and verbal consent was obtained from each study participant.

402 **Consent for publication**

403 Not applicable

404 **Availability of data and materials**

405 All data generated or analyzed during this study are included in this published article

406 **Competing interests**

407 The authors declared that no competing interest

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409 No funding was obtained from any source to conduct this study.

410 **Authors' contributions**

411 IF conceived and designed the study, performed analysis, and interpretation of data. ND
412 supervised the design conception, analysis, interpretation of data, and made critical comments at
413 each step of the. TS interpreted data and critical comments and drafted the manuscript. All
414 authors read and approved the final manuscript.

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446 **References**

- 447 1. Bhatnagar, K. and K. Srivastava, *Job satisfaction in health-care organizations*. Industrial
448 psychiatry journal, 2012. **21**(1): p. 75-78.
- 449 2. WHO, *Global strategy on human resources for health: Workforce 2030, 2016*
- 450 3. Blaauw, D., et al., *Comparing the job satisfaction and intention to leave of different*
451 *categories of health workers in Tanzania, Malawi, and South Africa*. Glob Health Action,
452 2013. **6**: p. 19287.
- 453 4. Oleribe, O.O., et al., *Identifying Key Challenges Facing Healthcare Systems In Africa*
454 *And Potential Solutions*. Int J Gen Med, 2019. **12**: p. 395-403.
- 455 5. Kadiri-Eneh, N., et al., *An assessment of job satisfaction among primary health care*
456 *workers in Rivers State, Nigeria*. Nigerian Journal of Medicine, 2018. **27**(3): p. 282-291.
- 457 6. Ugwa, E. and U. Charity, *A Narrative Review of Factors Affecting Job Satisfaction*
458 *among Nurses in Africa*. Hospital Practices and Research, 2016. **1**(3): p. 79-82.
- 459 7. Kebede, A.M. and G.W. Demeke, *The Influence of Leadership Styles on Employees' Job*
460 *Satisfaction in Ethiopian Public Universities*. Contemporary Management Research,
461 2017. **13**(3): p. 165-176.
- 462 8. Lee, X., B. Yang, and W. Li, *The influence factors of job satisfaction and its relationship*
463 *with turnover intention: Taking early-career employees as an example*. Anales de
464 Psicología, 2017. **33**(3).
- 465 9. Mekuria Mengistu, M., *Factors Associated to Job Satisfaction Among Healthcare*
466 *Workers at Public Hospitals of West Shoa Zone, Oromia Regional State, Ethiopia: A*
467 *Cross Sectional Study*. Science Journal of Public Health, 2015. **3**(2).
- 468 10. Bempah, B.S.O., *Determinants of Job Satisfaction among Community Health Workers in*
469 *the Volta Region of Ghana*. Public Policy and Administration Research, 2013. **3**(11).
- 470 11. Ayanore, M.A., et al., *Towards Resilient Health Systems in Sub-Saharan Africa: A*
471 *Systematic Review of the English Language Literature on Health Workforce,*
472 *Surveillance, and Health Governance Issues for Health Systems Strengthening*. Ann Glob
473 Health, 2019. **85**(1).
- 474 12. Deriba, B.K., et al., *Health professionals' job satisfaction and associated factors at public*
475 *health centers in West Ethiopia*. Hum Resour Health, 2017. **15**(1): p. 36.

- 476 13. Temesgen, K., M.W. Aycheh, and C.T. Leshargie, *Job satisfaction and associated factors*
477 *among health professionals working at Western Amhara Region, Ethiopia*. Health Qual
478 Life Outcomes, 2018. **16**(1): p. 65.
- 479 14. Gedif, G., et al., *Level of job satisfaction and associated factors among health care*
480 *professionals working at University of Gondar Referral Hospital, Northwest Ethiopia: a*
481 *cross-sectional study*. BMC Res Notes, 2018. **11**(1): p. 824.
- 482 15. Tesfaye Dadi Seboka (Autor), M.A.A., *Factors Associated With Job Satisfaction Among*
483 *Governmental Health Workers In Sebata Hawas Woreda, Oromia Region*.
- 484 16. Tran, B.X., M. Van Hoang, and H.D. Nguyen, *Factors associated with job satisfaction*
485 *among commune health workers: implications for human resource policies*. Global health
486 action, 2013. **6**: p. 1-6.
- 487 17. Deriba, B.K., et al., *Health professionals' job satisfaction and associated factors at*
488 *public health centers in West Ethiopia*. Human Resources for Health, 2017. **15**(1): p. 36.
- 489 18. Kolo, E., *Job satisfaction among healthcare workers in a tertiary center in kano,*
490 *Northwestern Nigeria*. Nigerian Journal of Basic and Clinical Sciences, 2018. **15**(1): p.
491 87-91.
- 492 19. Merga, H. and T. Fufa, *Impacts of working environment and benefits packages on the*
493 *health professionals' job satisfaction in selected public health facilities in eastern*
494 *Ethiopia: using principal component analysis*. BMC Health Serv Res, 2019. **19**(1): p.
495 494.
- 496 20. Liu, J., et al., *Job satisfaction, work stress, and turnover intentions among rural health*
497 *workers: a cross-sectional study in 11 western provinces of China*. BMC family practice,
498 2019. **20**(1): p. 9-9.
- 499 21. Kuburovic, N., et al., *Determinants of job satisfaction of healthcare professionals in*
500 *public hospitals in Belgrade, Serbia - cross-sectional analysis*. Srpski arhiv za celokupno
501 lekarstvo, 2016. **144**(3-4): p. 165-173.
- 502 22. Geleto, A., et al., *Job satisfaction and associated factors among health care providers at*
503 *public health institutions in Harari region, eastern Ethiopia: a cross-sectional study*.
504 BMC research notes, 2015. **8**: p. 394-394.

- 505 23. Kumar, R., et al., *Job satisfaction among public health professionals working in public*
506 *sector: a cross sectional study from Pakistan*. Human Resources for Health, 2013. **11**(1):
507 p. 2.
- 508 24. Kumar, R., et al., *Job satisfaction among public health professionals working in public*
509 *sector: a cross sectional study from Pakistan*. Human resources for health, 2013. **11**: p. 2-
510 2.
- 511 25. Singh, T., et al., *Job satisfaction among health care providers: A cross-sectional study in*
512 *public health facilities of Punjab, India*. Journal of family medicine and primary care,
513 2019. **8**(10): p. 3268-3275.

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Figures

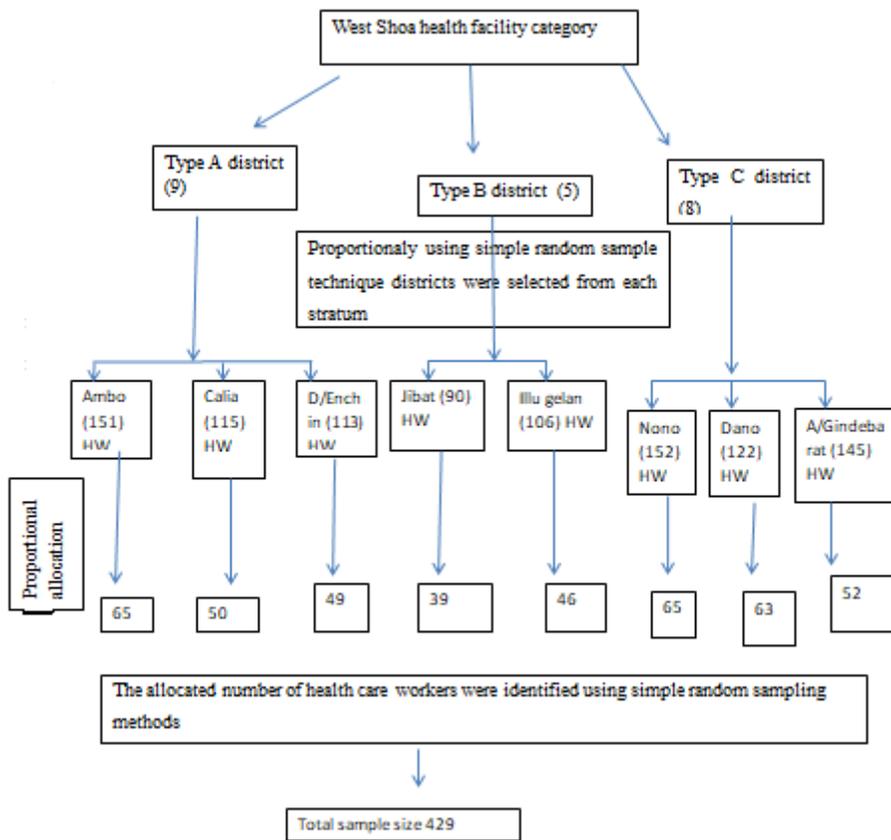


Figure 1

Sampling Procedures among health workers toward factors affecting health workers Job satisfaction in West Shoa, Oromia 2020 (n=429)

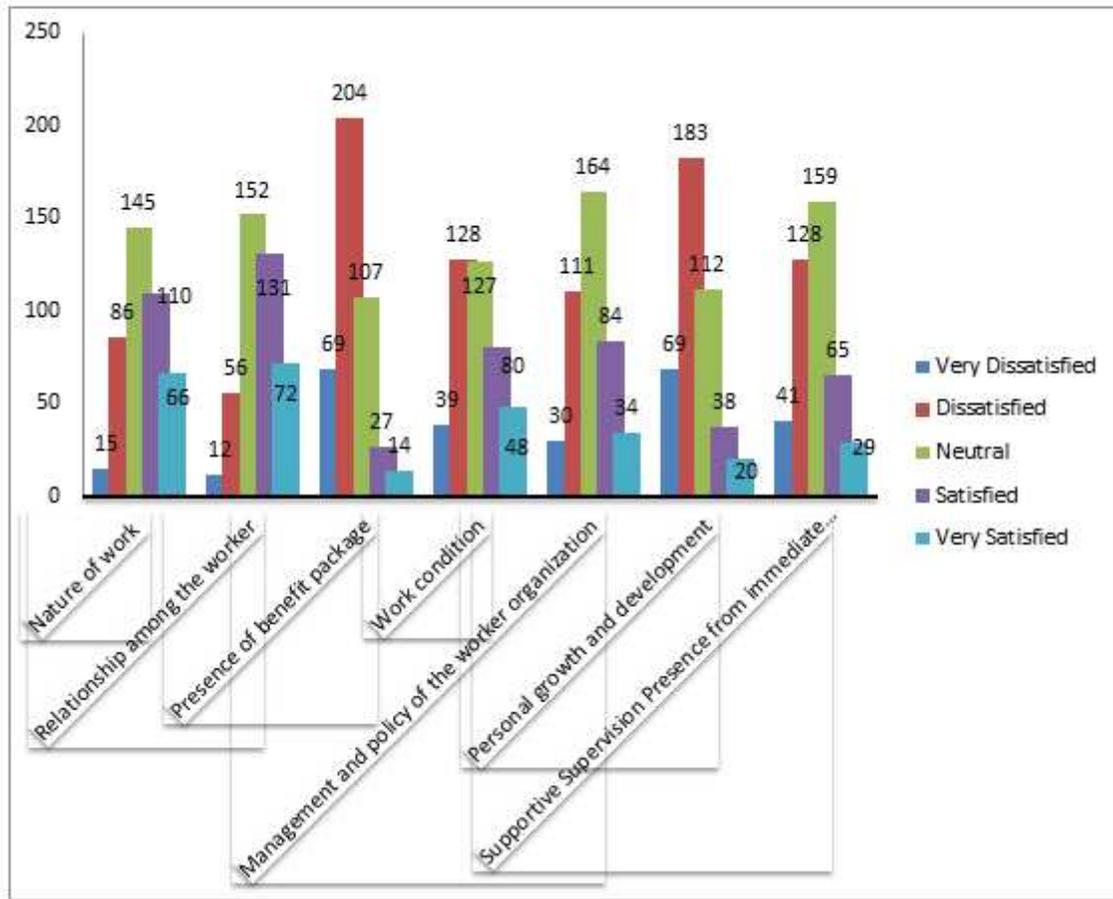


Figure 2

Job satisfaction data of Health Workers of West Shoa Zone, Oromia, March, 23- April 15, 2020 (n=422)

Supplementary Files

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