FISEVIER

Contents lists available at ScienceDirect

Women and Birth

journal homepage: www.elsevier.com/locate/wombi



Midwives' job satisfaction and intention to leave their current position in developing regions of Ethiopia



Muluken Dessalegn Muluneh^{a,b,*}, Geteneh Moges^a, Sintayehu Abebe^c, Yeshitila Hailu^d, Misrak Makonnen^e, Virginia Stulz^b

- ^a Amref Health Africa in Ethiopia, Monitoring, Evaluation and Research Department, Addis Ababa, PO Box 20855, Code 1000, Ethiopia
- ^b School of Nursing and Midwifery, Western Sydney University, NSW, 2751, Australia
- ^c Amref Health Africa in Ethiopia, Reproductive Maternal and Child Health Department, Addis Ababa, PO Box 20855, Code 1000, Ethiopia
- d Amref Health Africa in Ethiopia, Head of Programs, Addis Ababa, PO Box 20855, Code 1000, Ethiopia
- ^e Amref Health Africa in Ethiopia, Country Director, Addis Ababa, PO Box 20855, Code 1000, Ethiopia

ARTICLE INFO

Article history: Received 5 September 2020 Received in revised form 25 January 2021 Accepted 8 February 2021

Keywords: Midwives Job satisfaction Job retention Developing regions Ethiopia

ABSTRACT

Background: The aim of this research was to analyze midwives' job satisfaction and intention to leave in developing regions of Ethiopia.

Methods: A facility-based cross-sectional study was conducted amongst 107 midwives in four developing regions of Ethiopia. All midwives who were working in 26 health facilities participated in the study. A structured self-administered questionnaire, and in depth key informant interview guides, were used to collect data. Job satisfaction was measured by nine dimensions and intention to leave their current position was measured using three questions.

Results: More than two-thirds (67%) of the midwives were female, with a mean age of 26.1 (sd \pm 4.2) years old. Less than half (45%) of the midwives were satisfied with their job, less than half (42%) were satisfied with 'work environment' and less than half (45%) were satisfied with 'relationship with management' and 'job requirements'. Relatively better satisfaction rates were reported regarding 'professional status', of which more than half (56%) of midwives were satisfied, followed by more than half (54%) of midwives being satisfied with 'staff interaction'. Almost two-fifths (39%) of midwives intended to leave their current position.

Conclusion: Job dissatisfaction and intention to leave rates amongst midwives in developing regions in Ethiopia are a source of concern. The majority of midwives were most dissatisfied with their working environment and issues related to payment. Their intention to leave their current position was inversely influenced by job satisfaction. The introduction of both financial and nonfinancial mechanisms could improve midwives' job satisfaction, and improve retention rates within the profession.

© 2021 The Author(s). Published by Elsevier Ltd on behalf of Australian College of Midwives. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Statement of significance

Problem

Midwives working in Ethiopia who are not satisfied and intend to leave their current position will affect future maternal and neonatal mortality and morbidity. The number of midwives working in low income country regions of Ethiopia is low.

What is already known

Midwives are key players in the health care system to increase the health of women and newborns particularly in developing countries. Ethiopia has been working to increase the number of midwives over the past decade to reduce maternal and neonatal mortlaity and morbidity. However, programs are mainly driven towards community needs with less attention directed at midwives' perspectives.

What this paper adds

It is clear that a significant proportion of midwives in Ethiopia report job dissatisfaction and/or intend to leave their current job and that the situation is urgent. Addressing change and investment in the current health care system in Ethiopia is necessary to create a better situation for midwives.

^{*} Corresponding author at: Amref Health Africa in Ethiopia, Monitoring, Evaluation and Research Department, Addis Ababa, PO Box 20855, Code 1000,

E-mail addresses: mulusef@yahoo.com (M.D. Muluneh), Sintayehu.Abebe@Amref.org (S. Abebe), YESHITILA.HAILU@Amref.org (Y. Hailu), Misrak.Makonnen@Amref.org (M. Makonnen), v.stulz@westernsydney.edu.au (V. Stulz).

Introduction

The World Health Organization's (WHO) 2013 report on Human Resources for Health (HRH) declares as "a universal truth" that there is "no health without a workforce" [1,2]. Globally, the ability of a country to achieve its health targets depends largely on the knowledge, skills, motivation, and deployment of the people responsible for organizing and delivering health services [2–5]. There are global, regional, and country efforts, including the WHO HRH 2030 Strategy, to address HRH challenges and to ensure equitable access to skilled and motivated health workers that are a major component of a performing health system [2,6,7]. However, the majority of Sub-Saharan African (SSA) countries have an average of only 1.1 health workers per 1000 population, against the recommended minimum of 2.3 per 1000 population, and far less than the 4.45 per 1000 population estimated as necessary to achieve the Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC) [8,9]. Many SSA countries lack the human resources needed to deliver essential health interventions for several reasons, including new health worker graduates, maldistribution, barriers to inter-professional collaboration, inefficient use of resources, poor working conditions, a skewed gender distribution, migration of health workers within and across countries, poor skills mix, and demographic imbalances [6,9,10]. Ethiopia has critical HRH challenges which include shortages, disparities between urban and rural settings, poor motivation, retention, and performance-based recognition mechanisms [11]. Over the past two decades, there has been an increase in the number of health workers in Ethiopia through the expansion of training institutions and increasing annual intake of students. however it will be some time until the shortfall is addressed [12].

For instance, according to the HRH strategic plan of Ethiopia 2016-2025, the midwife to population ratio was 1 per 8200 population in 2016 (international benchmark is 1 per 5000). Despite progress, a greater effort is still required to meet the minimum standard of 2.3 health workers per 1000 as recommended by the World Health Organization (2006) through the expansion of health workers' pre-service education and training programs. Increasing and enhancing the capacity of midwives are critical elements to reduce the mortality and morbidity of maternal and child health particularly in Ethiopia [12]. Human resources management systems and reforms have led to some positive results in the utilization, retention and performance of the available health workforce in improving coverage, equity in access, quality and efficiency of health services [7,12]. Despite this progress, retaining skilled health workers with the appropriate skill mix in remote areas remains a major challenge due to low salaries and non-conducive working conditions [6.13].

The success of the health care delivery system is dependent on the hard work of motivated and satisfied health care providers [2,14]. Two major factors that influence the provision of quality health care include institutional capacity and readiness, and the commitment and competence of care providers [4,15,16]. Job satisfaction of care providers contributes to health care delivery reform that demands compassionate, 'respectful, and caring health professionals who deliver quality health care' [17]. A study that was conducted in Ethiopia at the national level found that almost two-thirds (61%) of nurses expressed satisfaction with their job and expanded recognition systems and opportunities for advancement are required to increase nurses' job satisfaction and motivation. Additionally, the same study found that equitable salary and fringe benefits are also required to reduce staff's job dissatisfaction [18].

Several studies have established an association between health workers' job satisfaction and intention to leave. A 2008 World

Health Organization report identified inadequate payment, lack of motivation, lack of training and supervision, and working environment as key HRH challenges, in addition to a shortage of health care providers. Without addressing these quality challenges through workable mechanisms, the health system cannot provide quality health services, even at the basic primary care level [19]. The Ethiopian government developed the HRH Strategic plan (2016–2025), to address the aforementioned challenges, within the broader objective of 'supporting the planning, development and retention of adequate, high performing and skilled health workers of different categories that fit the diverse health care needs of the Ethiopian people'. The enhancement of health workers' motivation and retention for improved performance was set as its fourth strategic outcome [7,20]. However, there are limited studies in the developing region of Ethiopia about the satisfaction and retention rates of midwives and this study aims to address this gap in the literature.

Methods

Study setting

Ethiopia's total population has grown from 38.1 million in 1983 to 114 million in 2020 [21]. Ethiopia is administratively divided into regional states and chartered cities, zones, woreda (districts) and kebele (wards). The regions are further subdivided into zones. Woreda or districts are smaller subdivisions under zones. Kebeles are the smallest administrative divisions [22]. From the highest administrative structure, four regions (The Afar Regional State, Benishangul-Gumuz Regional State, Gambella Regional State, and Somali Regional State) labelled as developing regions are characterized by low public service delivery including infrastructure, investment, and capacity. The major proportions of these regions are pastoralist in nature [22].

Human care workers are critical challenges in Ethiopia, particularly for midwifery graduates who are limited in number. In 2019, there were about 15,565 midwives (both diploma and degree level) for a population of such a large county [23]. In Ethiopia, midwifery training takes three years for a bachelor degree and two years for a diploma level. The majority of costs for training of mid-level health-care workers are financed and supported by: (a) the Ministry of Education; (b) the Ministry of Health; and (c) health and education partners. In Ethiopia, the health sector has been financed and monitored in two ways: through the Ministry of Finance and Economic Development and the Health Sector Development Partners joint forum [23]. According to the Ethiopian salary scale, health care workers are two steps higher on the civil service salary scale compared to other civil servants of equivalent rank. In Ethiopia, health care professionals such as nurses and midwives have a similar salary scale, unlike medical doctors who have a better salary. However, regional health bureaus have been mandated to strengthen different financial and non-financial incentives for health care providers to encourage and motivate professionals to stay in their jobs and in their profession. In Ethiopia, for lower and midlevel health care workers some financial incentives are available [2,23].

Design

A facility-based cross-sectional study that employed mixed quantitative and qualitative methods of data collection and analyses was conducted during December 2019. The study included 107 midwives across four developing regions of Ethiopia (Afar, Gambella, Benshangual-Gumuz and Ethiopian-Somali).

Sampling

The four developing regions were purposively selected. All zones were included and districts were randomly selected from each zone to include all health facilities in the selected districts studied. Midwives who were working during the study period in the 26 selected health facilities and who were willing to complete the self-administered questionnaire were included in the study. We used the database from the regional office to obtain a list of midwives and the human resource department provided the list of midwives working in the health facilities. Midwives were asked to self-administered the questionnaires by the researcher and completion of the questionnaire was taken as implied consent. Midwives were recruited by responding to a flyer and they subsequently signed information and consent forms for the qualitative interviews.

Midwives who worked in the health facility for less than six months were excluded to reduce individual desirability bias (meaning a tendency of midwives to answer questions in a manner that will be viewed favourably by researchers/others. This helps to reduce either over-reporting or under-reporting for their limited experience in their work positions).

Data were collected via a self-administered structured questionnaire, which contained basic socio-demographic information, job satisfaction, motivation and intention to leave questions. Job satisfaction questions were developed by adapting different instruments used for similar studies including multi-dimensional job satisfaction scales [2,24]. Job satisfaction was further organized into nine dimensions, each using a satisfaction subsidiary scale. The job satisfaction survey consisted of 59 items measured using a Likert scale from strongly disagree (1) to strongly agree (5). The nine dimensions of job satisfaction were as follows:

Dimension 1-Organizational policies refers to a health care provider's perception of organizational value, inter-organizational communication, and their level of engagement in the organizational planning and management. This dimension was measured using six items (maximum score of 30 and a minimum score of 6).

Dimension 2-Developmental opportunities refers to the perception of the likelihood of being promoted and was measured by two items (maximum score of 10 and a minimum score of 2).

Dimension 3-Midwife-Nurse Interaction refers to the working relationship amongst the staff and was measured using seven items (maximum score of 35 and a minimum score of 7).

Dimension 4-Payment (compensation and benefits) refers to care providers' total pay and was measured using eight items (maximum score of 40 and a minimum score of 8).

Dimension 5-Job autonomy refers to the extent of job-related independence and was measured using three items (maximum score of 15 and a minimum score of 3).

Dimension 6-Relationship with management refers to the perception of the relationship between health care provider and their supervisor and/or other management bodies, and was measured using five items (maximum score of 25 and a minimum score of 5).

Dimension 7-Job requirements refers to those activities that are performed as an integral part of the job and was measured using eight items (maximum score of 40 and a minimum score of 8).

Dimension 8-Professional status (recognition) refers to acknowledging and rewarding employees by institution and people who are being served to encourage effort and was measured using 12 items (maximum score of 60 and a minimum score of 12).

Dimension 9-Working environment involves geographical location as well as the immediate surroundings of the workplace and infrastructure of the health facility including the availability of essential materials and supplies. This was measured using eight items (maximum score of 40 and a minimum score of 8).

The overall job satisfaction score was estimated by taking the average score of each of the subscales. To measure the level of job satisfaction of each individual, the mean (average) value of all dimensions was calculated. Mean value of dimensions was taken as a cut-off point to determine whether a health worker was satisfied with his / her job. As a result, health workers for whom their score was below the mean were considered as dissatisfied and those with a score of the mean or above were regarded as satisfied.

'Intention to leave their current position' was assessed using three measurement questions adapted from Donnelly and Ivancevich (1985) (1) "it is likely that I will actively look for a new job next year" (2) "I often think about quitting" and (3) "I will probably look for a new job next year". Each question is represented with a five-point Likert scale to indicate their likelihood of leaving the organization in the near or distant future. A higher score indicates a higher intention to leave the organization.

Qualitative data were collected through key informant interviews (KII) which were audio-recorded, then transcribed verbatim into the original language and translated into English by the core staff members. The Key Informant Interviews (KII) information were collected from representatives from each of the Regional Health Bureaus (RHB), Zonal Health departments (ZHD), Woreda/ District/health offices and senior health professionals at regional/ zonal hospitals, and heads of the health facilities. In Ethiopia, rarely do midwives work in these leadership positions, and even though these key informants are not midwives, they work closely with midwives in their positions. Thirty-six key informant interviews and 16 focus groups were conducted. Transcripts were supplemented by field notes to clarify issues. The FGDs were conducted with midwives that were working in the sampled regions that included six to eight midwives in each group that participated in the discussions. All study participants were fully informed about the purpose of the study. The midwives were able to withdraw from the study at any time, however, the focus groups could not exclude any data that were provided, due to the collective number of participants. The self-administered questions were completed by individual midwives in a comfortable environment that ensured privacy. Key informant interviews were conducted by senior researchers in a face-to-face participatory interview technique and captured information by note-taking and the interviews were tape recorded with verbal consent from each of the informants. If midwives became distressed with any of the discussions, they were linked to counselling services.

Data entry and analysis

Quantitative data were entered, cleaned, and analyzed using SPSS version 21 software for Windows. Descriptive statistics were used to summarize key study variables using frequencies, percentages, means and standard deviations. Negatively stated items/questions were reversely coded. Mean values of all items were added to obtain the composite mean score. The mean was taken as a cut-off value to determine the proportion of agreement to the composite score, and the proportion above the mean was considered as a percentage of satisfaction. A regression model evaluated the associations of different variables with the levels of job satisfaction and intention to leave their current position and the p-value was set as <0.05 at 95% CI for statistical significance.

Reliability

Tests of reliability coefficients and internal consistency were calculated on all individual satisfaction dimensions and the overall satisfaction scale comprising of 59 items was evaluated by Cronbach's alpha. Cronbach's alpha for individual items ranged

from 0.70 to 0.93, and 0.79 for overall satisfaction and 0.88 for 'intention to leave their current position' which are considered acceptable measures of reliability. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was deemed very good at 0.84. All communalities were between the set cut-off values of 0.55 and 0.78.

Qualitative data analysis

The qualitative information collected through audio-recorded were transcribed verbatim into the original language and translated into English by the researchers. Transcripts were supplemented by field notes to clarify issues. The qualitative data analysis involved a hybrid coding approach which focused on thematic coding by creating pre-set and emergent themes of transcription of in depth interviews and focus group discussions. Additionally, any ideas, concepts, actions, relationships and meanings that emerged from the data that were different from the pre-set codes, were used as the emergent codes. Data were then analysed using a thematic approach by conducting an ongoing content analysis. Emerging themes were developed from the expanded interviews and discussions. In general, the qualitative data analysis followed the five interrelated steps: reading, coding, displaying, reducing, and interpreting. ATLAS software was used to analyse all the qualitative content.

Results

Quantitative results

Demographic characteristics of respondents

More than two-thirds (67%) of the midwives were female with a mean age of 26.1 (sd \pm 4.2) years old and over half (53%) were married. Almost three-quarters (71%) of midwives held diplomas and had work experience of more than four years (73%), with a mean work experience of 4.0 (sd \pm 3.6) years. The mean work years in the current workplace was 3.54 (sd \pm 3). The average monthly salary for their most recent job was 132 (sd \pm 5.4) USD, and 14% of

midwives reported to have an additional part-time job for which they earnt an average of 93 (sd \pm 27) USD in a typical month. Almost a fifth (18%) of midwives experienced delayed salary payment and almost two-thirds (60%) received in-service training pertinent to their job.

Socio-demographics and work-related factors associated with job satisfaction

Regression analysis was performed to determine the possible association of factors that may potentially influence job satisfaction. Factors that were included in the model included basic socio-demographic variables, educational level, total service years, years worked in a current health facility, salary, delay in salary pay, part-time employment and recent training. Accordingly, family size became the single most important statistically significant predictor of midwives' job satisfaction. A family size of greater than three demonstrated that a midwife was three times more likely to be dissatisfied in their job in comparison to those with a family size of less than three (OR = 0.39; 95% CI = 0.17; 0.91) (see Table 1).

Midwives' job satisfaction

The overall mean satisfaction score based on the nine satisfaction dimensions was 3.63 (± 0.65) which is below the mean score of satisfaction. Less than half (45%) of midwives were satisfied with their job (see Table 2). Analysing the various dimensions of job satisfaction, less than half (42%) of the midwives were satisfied with the 'work environment' and the 'relationship with management' and 'job requirement' (45%). Better satisfaction was reported for 'professional status' by more than half (56%) of midwives followed by 'staff interaction' (54%) (see Fig. 1).

Organizational policies

Less than half (44%) of midwives were satisfied by the level of information shared with them regarding organizational policies and administrative decisions in their facility, whereas almost two-thirds (60%) indicated trust in the leadership of the organization.

Table 1 Socio-demographics and work-related factors associated with job satisfaction, 2019.

Characteristics		Total frequency	Average n (%)		AOR (CI)
			not satisfied	satisfied	
Sex	Female	72(67%)	37(51)	35(49)	1
	Male	35(33%)	22(63)	13(37)	0.63 (0.27;1.43)
		107(100%)	59 (55%)	48(45%)	
Age in years	Below mean age (26.1)	67 (63%)	39(58)	28(30)	0.71 (0.32;1.57)
	Above mean age (26.1)	40 (37%)	20(50)	20(50)	1
		107(100%)	59 (55%)	48(45%)	
Marital status	Single	57 (53%)	29(51)	28(49)	1
	Married	50(47%)	30 (60)	20(40)	0.69 (0.32; 1.48)
		107(100%)	59 (55%)	48(45%)	
Family size	Below mean(3)	74 (69%)	46(62)	28(38)	1
	Above mean (3)	33(31%)	13(39)	20(61)	0.39 (0.17; 0.91)*
		107(100%)	59 (55%)	48(45%)	
Education	Diploma	76(71)	39(51)	37(49)	1
	Bachelor Degree	31(29%)	17(55)	14(45%)	1
	•	107 (100%)	56 (55%)	51(45%)	
Work years in current facility	Below mean (3.54)	65(61%)	38(59)	27(41)	1
	Less than mean	42 (39%)	21(50)	21(50)	0.63 (0.28; 1.39)
		107(100%)	59 (55%)	48(45%)	, ,
History of salary delay	Yes	19 (18%)	13(68)	6(32)	0.50 (0.17;1.45)
	No	88 (82%)	46(52)	42(48)	1
		107 (100%)	59 (55%)	48(45%)	
Part-time employment	Yes	15 (14%)	4(26)	11(74)	1
	No	92(86%)	25(55)	14 (45)	1.08 (0.38;3.25)
		107(100%)	59 (55%)	48(45%)	, ,

^{*} p-value significant at <0.001.</p>

Table 2Midwives' Job satisfaction composite scores, means, standard deviations, reliability coefficients, and inter-correlations, among other dimensions.

Satisfaction dimension	Number of items	Dimension		Item		Reliability coefficients	% satisfied
		Means	Sd	Mean	Variance		
Organizational Policies	6	18.26	5.48	3.04	1.89	0.75	53(49%)
Developmental opportunities	2	5.25	2.58	2.62	2.1	0.70	49(46%)
Staff interaction	7	22.92	7.89	3.27	2.1	0.88	58(54%)
Payment and benefit	8	19.68	6.96	2.46	2.08	0.75	50(47%)
Job Autonomy	3	8.54	3.50	2.84	1.75	0.85	50(47%)
Management Relationship	5	13.61	4.88	12.72	1.86	0.76	48(45%)
Job requirement	8	23.81	6.96	2.96	1.75	0.81	48(45%)
Professional status	12	41.08	12.85	3.42	2.02	0.93	60(56%)
Working environment	8	25.24	6.62	3.15	1.71	0.78	45(42%)
Overall satisfaction	59	178.30	38.86	19.81	49.03	0.79	48(45%)

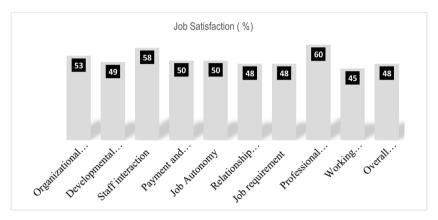


Fig. 1. Midwives' job satisfaction over the nine dimensions.

Developmental opportunities

Over half (57%) of midwives, respectively, were dissatisfied with the opportunity they were provided to continue their professional development by enrolling into higher education and with the fairness in obtaining promotional opportunity based on performance evaluation.

Midwife-staff interaction

Almost three quarters (72%) of midwives reported satisfaction about being respected by their peers and almost two-thirds (64%) with the presence of good friends at the workplace, that was measured by the staff interaction dimension. In terms of working relationships and satisfaction with nurses in the facility, almost two-thirds (61%) of nurses accepted requests from midwives, more than half (56%) respected midwives, two-fifths (40%) reported a high level of teamwork between nurses and midwives and more than two-fifths (43%) of nurses appreciated the role of midwives.

Payment and benefit

The payment and benefit dimension was indicated as the most dissatisfying factor for midwives. Almost one-fifth (37%) were satisfied with their current pay and sufficient for their cost of living, and almost two-thirds (59%) were dissatisfied with the rate of increment in their salary. Moreover, almost two-thirds (62%) of midwives demanded an increase in their basic salary.

Autonomy

In terms of the job autonomy dimension, half of the midwives were satisfied with the freedom to do things the way they like at work, whereas more than half (55%) reported satisfaction with decisions they made regarding their work and the opportunity to do what they wanted to do.

Relationship with management

More than half (55%) of midwives were satisfied with the regular and timely feedback they were provided by their supervisors and managers that assisted them to improve their performance and the individualized care they received as a person.

Job requirements

More than half (54%) of midwives were satisfied in the short-term training they received. However, only more than a third (37%) were satisfied with the learning opportunities they received

Professional status

Nearly two-thirds (65%) of midwives do not doubt that their job is important and meaningful and nearly two-thirds (64%) reported that they were proud to be a midwife and enjoyed their job. However, only less than half (47%) showed satisfaction with the opportunity they had to use their knowledge and skills.

Work environment

Only two-fifths (40%) of midwives were satisfied with the availability of essential resources and less than a half (43%) of midwives appreciated their profession. Moreover, just over half (52%) of midwives would recommend midwifery to their friends.

Socio-demographics and work-related factors associated with intention to leave their current position

Furthermore, socio-demographic and work-related factors that are assumed to influence intention to leave were analyzed using regression statistics. The results showed that being male and having a part time job was associated with intent to leave current position. (see Table 3).

Table 3 Factors associated with intention to leave current position, 2019.

Characteristics	Options	Average n (%)	P-value (95%CI)	
		not satisfied	satisfied	OR
Sex	Female	50(69)	22(31)	1
	Male	16(46)	19(54)	2.69(1.73,6.20)*
Age in years	Below mean age (26.1)	41(61)	26(39)	1.05(0.47,2.36)
	Above mean age (26.1)	25(62)	15(37)	1
Marital status	Single	36(63)	21(37)	1
	Married	30 (60)	20(40)	1.14(0.52,2.49)
Family size	Below mean (3)	48(65)	26(35)	1
·	Above mean (3)	18(54)	15(45)	1.54(0.66,3.54)
Education	Diploma	50(66)	26(24)	1
	Bachelor Degree	16(52)	15(48)	1.80(0.77,4.21)
Work experience	4 years & less	50(64)	28(36)	1
	Greater 4 years	16(55)	13(45)	1.45(0.61,3.44)
Work years in current facility	Below mean (3.54)	51(64)	29(36)	1
, , , , , , , , , , , , , , , , , , ,	Above mean (3.54)	15(56)	12(44)	1.40(0.58,3.41)
Monthly salary in USD	Less than mean (132)	38(58)	27(41)	1.56(0.71,3.47)
, , , , , , , , , , , , , , , , , , ,	Greater than mean (132)	28(67)	14(33)	1
History of salary delay	No	57(64)	31(35)	1.42(0.63;3.19)
	Yes	9(47)	10(53)	1
Recent training	No	52(55)	41(45)	1.08(0.38;3.25)
0	Yes	8(53)	7(47)	1
Have part-time job	No	50(69)	22(31)	1
	Yes	16(46)	19(54)	2.69(1.73;6.20*

^{*} p-value significant at <0.05.

The overall mean score for midwives' intention to leave was based on three items (2.68 (sd \pm 1.2)) that is interpreted as almost two-fifths (39%) of midwives having an intention to leave the facility in which they are currently working and more importantly, more than half (51%) declared that they are actively thinking of looking for a new job in the following year, whilst almost two-fifths (39%) often think about quitting the job.

Qualitative results

Several factors were also discovered in the qualitative findings concerning job satisfaction. Overall, the identified themes included financial issues, relationships with management, lack of career progression, lack of developmental opportunities, work environment, work overload and mentoring.

Financial issues

The Benishangul Gumuz region has implemented the national HRH regulation on incentives for midwives but other regions have not implemented this regulation. A representative from Benishangul Gumuz expressed satisfaction with the implementation of staff incentives as:

"Incentives are paid timely to midwives: risk payments; overtime (duty) payments. Additionally, daily allowance is also provided when midwives go to kebeles (the lowest administrative structure/village) for community-wide education programs. These are all fulfilled. Because of these they are satisfied and work here. They do not tend to leave the health centers." (Representative from Benishangul Gumuz regional Health Bureau)

Qualitative findings from Gambela and Somali regional states showed the satisfaction of health workers, in general, was found to be low due to multiple factors. The study participants claimed that the salary of a midwife is low and does not consider the current cost of living. Delays in receiving monthly salaries, absence of adequate payment, risk allowances and lack of penalty rates (overtime fees) were found to be the prevailing factors that negatively impact job satisfaction. The reason for low/no benefit packages for midwives was related to the shortage of budgets

across all government sector offices, as explained by one of the key informants:

"In previous times, there were three health officers and one BSc Nurse working in this health centre. They served for a short period and all the three professionals left the health centre in 2009. Their main reason to leave the facility was the delay to get a monthly salary". (Health center Representative, Gambela Region)

Inadequate benefit and salary packages were the most cited and prevailing reasons that impacted job satisfaction and motivation level of midwives as outlined by the qualitative findings. Indeed, there is a hardship allowance (desert allowance) of 30% of the monthly salary that is paid to all health workers, but this special benefits package is unsatisfactory as perceived by key informants. As a result, the motivation and satisfaction of midwives was very low in general, although there is slight variation across the four regional states. Specific benefit packages and risk allowance payments (17 USD) for midwives are not properly applicable in regional states like Gambela, Afar and Somali and identified as one of the factors for job dissatisfaction according to representatives of health centres and the district health office.

"Midwives are exclusively eligible for hardship allowance but there is no payment for risk allowance and duty per hour payment." (KII from Somali region)

".....If you are getting less than you deserve, you tend to limit yourself from engaging a lot in the work. But if you are paid right, you would want to do more. Do you know how much midwives are paid for duty? It is very funny... for ten days duty, they are paid, around 3 USD which is disappointing... while midwives working in the referral hospital are paid, as I heard it, is between 0.93 to 1.11 USD per hour." (Midwives KII from Somali region)

Another key informant from the Afar region stated the following that supports the above finding:

"The district health office could not understand the reasons for midwives leaving their jobs. There is unfair incentive payment (hardship allowance restriction). I said unfair because take, for instance, Logia, located about 60Kms from Millie, health workers have got hardship allowance (50% of their basic salary) but this is not the case here but we are still far from big towns. In general, this district is experiencing a high turnover of health workers particularly midwives because of the failure to meet health workers expectation related to benefits." (KII from one of the district health office of Afar region)

The benefits packages also vary by work place and duty station: "The salary in referral hospitals and other hospitals is very different, it doesn't match at all. It is very wide. Diploma holder midwives' gross salary is 201 with a net payment of 59.26 to 66.67 USD but diploma midwives working in the referral hospital receive a net payment of 111 USD. Imagine how much bachelor degree holder midwives would receive?" (KII Midwives from Afar region)

Regarding the monthly salary, there has been a delay in disbursing the salary on time and this is a critical problem in the Gambella Regional State. This was observed to be the primary factor which negatively influenced health workers' including midwives' motivation, retention and job satisfaction as well as those who worked at health centres.

"Delay in monthly salary is a critical problem in this district. Sometimes the monthly salary is delayed for more than two months. For example, at present, it has been 52 days since staff working in this health centre received their last salary, which is very disappointing." (KII from one of the districts of the Gambella region).

Likewise, most of the high turnover is seen amongst health officers and midwives that originate from distant places (who previously lived in other regional states) as it appeared in the quantitative findings. This is particularly true in the Gambela, Assosa and Somali regional states. For example, in one of the visited health facilities in the Gog district of Gambela regional states, almost all the staff working in the health facility at the current time were permanent residents of the area and native to the working area. A report by the head of the health facilities stated all of the deployed staff that originated from other areas left the health facilities after serving for a short period. The language barrier, unsatisfactory working conditions of the area including weather conditions, personal and family-related reasons, lack of additional incentives, delay in monthly salary and other factors were reported as the main factors for high turnover of staff and levels of job dissatisfaction.

"There is a risk allowance payment for midwives in other regional states of Ethiopia. But in the case of Gambela regional state, payment for risk allowance is usually overlooked and not paid for midwives working in the existing health centres." (KII from district health office, Gambella regional state).

Relationships with management

Moreover, leadership and management related skill gaps amongst senior officials working at the district health office and the zonal health department were also explained as factors that negatively influenced job satisfaction amongst health workers.

"Most professionals working in the district health offices are political nominees that lack the necessary technical and managerial skills to effectively lead health professionals working in the primary health care units which I perceive affects the job satisfaction of health workers." (Gog health centre representative, Gambela region).

Lack of career progression

Lack of career progression and stagnant salary increments were also another set of factors that demotivated midwives and other health professionals. In regional states such as Gambela, senior staff including midwives and newly assigned staff with the same qualification all received the same monthly salary which was found to be a source of job dissatisfaction. The qualitative findings revealed promotion, either based on years of experience or performance measures, was absent.

Lack of developmental opportunities

Midwives' job dissatisfaction and lack of motivation was attributed to lack of educational development opportunities. The following comments demonstrate the relationship between the quality of training and level of job satisfaction:

"....Besides, there is a skill gap amongst midwives; they demand training on basic emergency obstetric and neonatal care (BEmONC), termination of pregnancy care, newborn care and other related training which is less available for midwives." (KII Midwives from Afar region)

Respondents were also asked for reasons that may drive or influence their intention to leave the facility in which they were working, and the most frequently cited reasons were better educational opportunities to upgrade their education and salary. This finding, in fact, was consistent throughout the reported data from various sources, including the qualitative findings generated from district, regional and federal level informants. The above qualitative findings are consistent with the quantitative results of this study.

Work environment

Lack of basic infrastructure such as electric power, water and essential equipment and supplies in their health facilities were also reported as a factor that played a significant role for job dissatisfaction of health professionals including midwives.

"Availability of adequate equipment and other basic services such as absence of electric power in many of the existing health institutions directly affects the quality of the service that the midwife is providing to the community. In the absence of this essential equipment and services, providing quality service is unlikely and would make a midwife de-motivated and dissatisfied." (KII Somali district health office)

In health facilities with solar power, lack of timely maintenance whenever technical problems were encountered and low power capacity of existing solar power that were used for other purposes were the challenges to fully meet the demands of staff working at the health facilities.

".... Only three of the health centres were accessible to basic infrastructure (water, electricity and road) and incentives (hardship alliance). These are the push factors for many trained and experienced." (KII from district health office, Afar region)

Similarly, "having no electricity, midwives are forced to carry torches – sometimes with their mouth / teeth – at night when they attend births. This situation is frustrating for them and for all of us too". (KII from district health office, Afar region).

There is also a lack of availability of essential equipment such as personal protective equipment in the four regional states according to the findings explored from the representatives of regional health bureaus which supports the findings displayed in the quantitative results.

As explained by the key informants, there is a high intention to leave government jobs amongst midwives across the visited districts as well as in other districts found in the four regions. Moreover, in regional states like Gambela (where large refugee camps are operating) existence of Non-Government Organizations (NGO's) and availability of a large labour market in NGOs working both in refugee and host communities was another reason for the

high turnover of midwives from the health facilities and hospitals as NGOs provide better remuneration and work environments to attract midwives to leave government-managed health centres and hospitals.

"High turnover of health workers is the big challenge of this district, particularly midwives and health officers have left to join non-governmental organizations working in this area. There are so many reasons for the turnover. We have employed six midwives in the past three years. But only half of them are currently working at the hospital and no midwives are working at health centres at present." (FGD representative of Gog district health office, Gambela region).

Similarly, perceptions on the safety and security situation of working areas were also mentioned as factors that enhance the turnover and intention to leave jobs amongst widwives working in developing regions. Similarly, the security issue was also mentioned a concern for other health professionals working in the health facility.

"In particular midwives perceive many districts found in Gambela regional states as conflict-prone areas and feel little personal safety and security, which result in looking for jobs in other areas and settings." (FGD representative of Gog district health office, Gambela region).

Another comment forwarded from the Benishangul Gumuz regional state health bureau supports the above finding:

"In general, the turnover of health workers is very high in this region. Commonly there are two types of turnover in this region. For example, a midwife who is trained on different skills like prevention of mother to child transmission of HIV and neonatal resuscitation gets transferred from the health centre to the district health office to work like experts. This practice takes a higher percent of staff leaving their position. The second point is they leave for neighbouring regions; Amhara and Oromia. These regions attract and welcome more trained and experienced midwives from Benshangul Gumuz instead of employing new graduate midwives. They leave this region because, they want to be near their family, seeking a better location (big town, good infrastructure) and a better work environment". (FGD, representative from Benishangul Gumuz RHB).

Work overload

Work overload was also mentioned as one source of job dissatisfaction for midwives. In particular, midwives are commonly assigned in the delivery unit to attend labour and birth where the potential rate of exposing infection is higher and midwives become more exhusted in comparison to other professionals that are usually assigned to serve clients in family planning, antenatal care and other units. As the midwives do not work in other areas, their jobs may become monotonous. The midwives also do not receive penalty rates for working after hours which makes them always overburdened and dissatisfied with the job they are doing.

"They are confined to work and only work in the labour ward. Everybody, from top to bottom, assumes that their competency is only birth while the truth is they have other competencies . . . starting from adult reproductive health, youth sexuality, safe termination of pregnancy, family planning, ANC, etc. These areas of competencies are mostly occupied by nurses. Therefore, midwives become exhausted doing the same type of work and become so desperate to change to other professions". (KII, Federal Ministry of Health).

Furthermore, a key informant from the regional Health Bureau stated that midwives' nature of work involves two types: "The

donkey work" and "dirty work". It is called "donkey work"- because the job is very tiresome; and "dirty work" because it involves cleaning and washing. Therefore, there should be an opportunity for a midwife to rotate to other areas such as family planning or antenatal clinic units. A complemented argument to the above also follows:

"Birth room is considered as the 'midwives' only realm' by everyone and . . . even if it is considered as such, no one recognizes their endurance and the impact they are making in decreasing maternal and newborn deaths." (KII from the Ethiopian Midwives Association).

Mentoring

The availability of established systems and structures for mentoring, coaching and supervision of midwives working in primary health care units by senior professionals (working in secondary and above hospitals) were explored to identify the adequacy of mentoring and coaching activities in the four regional states. These findings identified that there was no regular working arrangements across the four regional states to implement mentoring, coaching and supportive supervision activities for midwives.

"There is no functional system of monitoring, coaching and supervision. We have tried to conduct irregular supervision as part of our routine activity. Last year we have conducted supportive supervision only two times. The main challenges are to undertake coaching, mentoring and supportive supervision due to a shortage of transport, fuel budget and unsatisfactory skills of the district staff. In general, there are no mentoring and coaching mechanisms that are used to improve the skills of health workers and midwives." (A FGD representative from a zonal health department).

Mentoring and coaching activities for midwives are better in hospitals in the country particularly in agrarian regions of the country, as senior staff are provided the opportunity to meet those midwives working in the same facilities. However, as reported by regional health bureau representatives from developing regions, the number of senior professionals in developing regions are limited. Subequently, hospitals in developing regions have limited capacity to deliver mentorship for midwives. These factors are the major challenges for providing regular and frequent mentoring and coaching activities for midwives in developing regions. Unless there is an adequate number of senior professionals in primary health facilities and hospitals in developing regions of Ethiopia, it is unlikely that midwives will be mentored.

The above findings were also echoed by the Federal Ministry of Health (FMOH) key informants. According to the key informants, the FMOH commenced a mentoring initiative in collaboration with one international NGO by hiring 25 experienced midwives. These mentors were then deployed to all regions, including Addis Ababa and Dire Dawa city areas. Due to this initiative's success, the number of mentors was increased to 100 as per FMOH's recommendations; and regions were provided a mandate to hire additional mentors. Some regions hired mentors with no qualifications (those who were not midwives) and midwives with less experience. The main reasons for hiring mentors with no qualifications were language barriers (inability to speak the language of the region) and lack of adequately qualified midwives.

A key informant from the Ethiopian Midwives Association also recommended that midwives with extensive experience who are supported by mentorship training are the most preferred mentors for midwives. This is demonstrated by the following quote:

"Steps followed by a midwife during labour and birth are not the same as the doctors specialized in obstetrics / gynaecology. Of course, they (the doctors) could provide theoretical knowledge deeper than midwives, which would be a good advantage. But when it comes to practical skills, midwives should be mentored and coached by experienced midwives." (KII from Midwife association).

In alignment with the above findings, recording and management of HR-related data in district health offices and regional health bureaus is difficult to extrapolate and almost impossible to obtain health worker related data from previous years. There was poor documentation of human resource data across the visited districts and regional health bureaus. Subsequently, this poses a major problem and creates challenges to identify midwives' turnover trends. In all cases, there is no established system and capacity to ensure HRH data is documented and available and there is no reliable, up-to-date information regarding the number of health workers working in government health institutions, including those who have left the government sector. Even though there has been an initiative since 2009 to implement an electronic Human Resource Information System (HRIS), it has been unsuccessful and is non-functional at both the district and regional health bureau levels. As a result, there is a critical lack of up-to-date data to report the trends of health worker's retention and it is an obstacle for evidence-based management decision making.

Discussion

The survival of the health care system and achievement of its goals are largely influenced by human resources in terms of number, skill mix and distribution [15] and also in terms of midwives' performance. The success of the health care system is also likely to be influenced by the individual health care provider's motivation and effort towards attaining the goals of the health care delivery system [2].

This study has identified financial issues, relationships with management, lack of career progression, lack of developmental opportunities, work environment, work overload and mentoring as key challenges related to midwives' job satisfaction levels. Similarly, there have been numerous factors identified to influence health providers' job satisfaction levels by numerous scholars and these include recognition, communication, working conditions, job importance and clarity of responsibilities, degree of professionalism, organizational setting and climate, interpersonal relationships with co-workers, positive affectivity, job security, workplace flexibility and job autonomy, gender, age, level of education and work experience [25–27].

In a national study attended by the Ministry of Health amongst health workers employed in the public health sector, the overall motivation and job satisfaction amongst the 1354 health workers (medical doctors, anaesthetists, midwives, health officers and health managers), was below 50%, and almost half (49%) intended to leave their jobs in the following year. Almost two-thirds (64%) of midwives were satisfied in their job. This national study compares with our study in which over half (54%) of the midwives were satisfied in their job and this could be explained by participants living in developing regions which were relatively pastoralist and less developed regions in the country and subsequently having weaker leadership and governance in the health care system [28]. Findings from Aklilu et al.'s [28] study reported that salary and benefits were the main factors why the majority (80%) of health workers reported dissatisfaction. Moreover, working and living conditions such as workload, work-related risks and hazards, safe work environment, adequate supplies and equipment and appropriate infrastructure were also factors that strongly influenced job satisfaction levels. Recognition, being appreciated by coworkers and community access to basic amenities, supportive supervision, and training opportunities were also identified to influence job satisfaction and intention to stay in the profession [29,30]. All of these findings from these previous studies were consistent with the findings of our study. Both our study and a study conducted by Derib et al. [30] documented that job satisfaction was relatively higher amongst older workers with higher educational qualifications.

Similar to our study, midwives' job satisfaction levels of 45% in our study was comparable with Abraham et al.'s [27] Ethiopian study in 2020 that documented health workers' job satisfaction levels of 45% and higher income was also significantly associated with higher job satisfaction levels. Age and marital status have been shown to have marginal influence on job satisfaction levels [4]. Similar levels (41.4%) of job satisfaction were reported amongst health care providers working in Jimma University hospital [31]. Health professionals working in health facilities in west Gojam Amhara regions identified that compensation-benefits, recognition by management and opportunity for development were associated with increased job satisfaction levels [27,30,32]. Our study identified that lower job satisfaction levels in midwives were related to salaries, work conditions, lack of career promotion and developmental opportunities and these factors were also identified by Abernathy et al. [4] in 2014. Studies have also reported high levels of satisfaction with the nature of the job and co-workers' relationships as important factors influencing job satisfaction and these findings are synonymous with our study [2,33,34]. A hospital-based study conducted in central Ethiopia [16] revealed that almost two-thirds (64%) of health professionals were more likely to demonstrate higher motivation levels if they received monthly financial benefits.

In our study, only two-fifths (40%) of midwives were satisfied with the availability of essential resources which was related to their working conditions. This is consistent with evidence about work environments that has been shown to impact on doctors' motivation levels [35] and these findings resonate with our study that showed that lack of basic infrastructure also contributed to job dissatisfaction levels amongst midwives. Lack of basic infrastructure such as electric power, water and essential equipment and supplies in their health facilities were reported as a factor that played a significant role for job dissatisfaction of health professionals including midwives. Our study showed, almost two-fifths (39%) of midwives intended to leave their current position and more importantly, more than half (51%) declared that they are actively thinking of looking for a new job in the following year which are comparable with other studies [36,37]. Similarly, other studies in Ethiopia reported that half to almost two-thirds (61%) of nurses [28,37] intended to leave the facility in which they worked in the following year.

This study has some limitations. This study was cross sectional and qualitative by nature and unable to show any causal effect, however substantial findings for this region of Ethiopia. Although this study provides good evidence for the developing region of Ethiopia, the findings cannot be generalized to other developed countries.

Conclusion

Midwives' job dissatisfaction and intention to leave is alarmingly high in Ethiopia. Over half of the midwives were dissatisfied with the seven dimensions out of the nine. Findings reported in this study provide vital evidence to inform policy and decision makers to respond to the health work force response of the country and in alignment with the SDG's target by 2030. Working environment and items related to payment and benefits were dissatisfying for the vast majority of midwives. About half of midwives reported that they would not stay in their current role in

the forthcoming year. Intention to leave was found to be inversely influenced by job satisfaction.

Improvement of job satisfaction and the retention of midwives could be achieved through the introduction of both financial and non-financial mechanisms. Monetary interventions suggested for consideration include salary adjustment and improvements to incentive packages. Improved sense of belonging, performance-based recognition, fairer opportunities for career development, improved work environments and transportation, as well as creating conducive work conditions, mentoring, coaching and supportive environments could increase job satisfaction and therefore the retention of midwives.

The government of the region and partners working in the region needs to address midwives' retention in the four regions as a top priority in the country. Furthermore, this study triggers the need for more evidence to increase various modalities of incentive packages for midwives to improve job satisfaction and motivation so that policy will change service delivery in the health care system for a happier, healthier workforce.

Ethical clearance

Ethical clearance and approval of the study were obtained from the regional health bureaus research review committee. Official permission was obtained from the study health facilities.

Funding

None declared.

Author contributions

The first author was involved in the conceptualization of this study. The first and second authors carried out the analysis and drafted the manuscript. All the other authors were involved in the revision and editing of the manuscript. All authors read and approved the final manuscript.

Conflict of interest

None declared.

Acknowledgements

The authors are thankful for all study participants and regional Health bureaus

References

- A Universal Truth: No Health Without a Workforce [https://www.who.int/workforcealliance/knowledge/resources/GHWA-a_universal_truth_report.pdf].
- [2] Global Strategy on Human Resource for Health Workforce 2030 [https://apps. who.int/iris/bitstream/handle/10665/250368/9789241511131-eng.pdf?se-quence=1].
- [3] G. Cometto, T. Boerma, J. Campbell, L. Dare, T. Evans, The Third Global Forum: Framing the health workforce agenda for universal health coverage, Lancet Glob. Health 1 (6) (2013) e324–325.
- [4] A. Abernathy, J. Byerley, Developing the health care workforce of the future for North Carolina, N. C. Med. J. 80 (3) (2019) 150–154.
- [5] C.-A. Dubois, M. McKee, Ellen Nolte, in: Edited by Press OU (Ed.), Human Resources for Health in Europe, 2006, pp. 276 New York: Maidenhead.
- [6] D.A. Forster, H.L. McLachlan, M.-A. Davey, M.A. Biro, T. Farrell, L. Gold, M. Flood, T. Shafiei, U. Waldenström, Continuity of care by a primary midwife (caseload midwifery) increases women's satisfaction with antenatal, intrapartum and postpartum care: Results from the COSMOS randomised controlled trial, BMC Pregnancy Childbirth 16 (1) (2016) 28.
- [7] D.R. Hotchkiss, H. Banteyerga, M. Tharaney, Job satisfaction and motivation among public sector health workers: Evidence from Ethiopia, Hum. Resour. Health 13 (1) (2015) 83.

- [8] E. Badr, N.A. Mohamed, M.M. Afzal, B. Khalif Mohamud, Strengthening human resources for health through information, coordination and accountability mechanisms: The case of the Sudan, Bull. World Health Organ. 91 (11) (2013) 868–873
- [9] T. Yigzaw, F. Ayalew, Y.M. Kim, M. Gelagay, D. Dejene, H. Gibson, A. Teshome, J. Broerse, J. Stekelenburg, How well does pre-service education prepare midwives for practice: Competence assessment of midwifery students at the point of graduation in Ethiopia, BMC Med. Educ. 15 (2015) 130.
- [10] F. Ayalew, S. Kibwana, S. Shawula, E. Misganaw, Z. Abosse, J. van Roosmalen, J. Stekelenburg, Y.M. Kim, M. Teshome, D.W. Mariam, Understanding job satisfaction and motivation among nurses in public health facilities of Ethiopia: A cross-sectional study, BMC Nurs. 18 (2019) 46.
- [11] M.R. Reich, J. Harris, N. Ikegami, A. Maeda, C. Cashin, E.C. Araujo, K. Takemi, T.G. Evans, Moving towards universal health coverage: Lessons from 11 country studies, Lancet (London, England) 387 (10020) (2016) 811–816.
- [12] G. Cometto, S. Witter, Tackling health workforce challenges to universal health coverage: Setting targets and measuring progress, Bull. World Health Organ. 91 (11) (2013) 881–885.
- [13] J. Campbell, J. Buchan, G. Cometto, B. David, G. Dussault, H. Fogstad, I. Fronteira, R. Lozano, F. Nyonator, A. Pablos-Méndez, et al., Human resources for health and universal health coverage: Fostering equity and effective coverage, Bull. World Health Organ. 91 (11) (2013) 853–863.
- [14] A.M. Mosadeghrad, Factors influencing healthcare service quality, Int. J. Health Policy Manag. 3 (2014) 77–89.
- [15] Primary Health Care, Now More Thna Ever PHC [https://www.who.int/whr/ 2008/08_overview_en.pdf].
- [16] Z. Weldegebriel, Y. Ejigu, M. Woldie, Motivation of health workers and associated factors in public hospitals of West Amhara, Northwest Ethiopia, Patient Prefer. Adherence 10 (2016) 159–169.
- [17] K. Yayehyirad, M. Hailu, T. Gebre-Emanuel, Evolution of Human Resources for Health in Ethiopia, (2014).
- [18] G.M. Weaver, B.N. Mendenhall, D. Hunnicutt, R. Picarella, B. Leffelman, M. Perko, D.L. Bibeau, Performance against WELCOA's worksite health promotion benchmarks across years among selected US organizations, Am. J. Health Promot.: AJHP 32 (4) (2018) 1010–1020.
- [19] N. Ahmad, N.O. Oranye, A. Danilov, Rasch analysis of Stamps's Index of Work Satisfaction in nursing population, Nurs. Open 4 (1) (2016) 32–40.
- [20] J.E. Parsons, Addressing workforce challenges in healthcare calls for proactive leadership, Front. Health Serv. Manage. 35 (4) (2019) 11–17.
- [21] International Data Ethiopia [https://www.prb.org/international/geography/ethiopia].
- [22] CSA, İCF, Ethiopia Demographic and Health Survey 2016, CSA and ICF, Addis Ababa, Ethiopia, and Rockville, Maryland, USA, 2017.
- [23] MOH, Health and Health Related Indicators, MOH, Addis Ababa, Ethiopia, 2019.
- [24] H. de Almeida, A. Orgambídez, Workplace empowerment and job satisfaction in portuguese nurses: An explicative model, Health Care Manag. 38 (3) (2019) 220–227.
- [25] P.A. Bovier, T.V. Perneger, Predictors of work satisfaction among physicians, Eur. I. Public Health 13 (4) (2003) 299–305.
- [26] J.S. Haas, E.F. Cook, A.L. Puopolo, H.R. Burstin, P.D. Cleary, T.A. Brennan, Is the professional satisfaction of general internists associated with patient satisfaction? J. Gen. Intern. Med. 15 (2) (2000) 122–128.
- [27] World Health O, Midwives Voices, Midwives Realities. Findings From a Global Consultation on Providing Quality Midwifery Care, World Health Organization, Geneva. 2016.
- [28] M. Aklilu, W. Warku, W. Tadele, Y. Mulugeta, H. Usman, A. Alemu, S. Abdela, A. Hailemariam, E. Birhanu, Assessment of job satisfaction level and its associated factors among health workers in addis ababa health centers: A cross-sectional study, Adv. Public Health 2020 (2020) 1085029.
- [29] MOH: Strengthening Human Resources for Health End of Project Report: 2012–2019. Addis Ababa.
- [30] B.K. Deriba, S.O. Sinke, B.M. Ereso, A.S. Badacho, Health professionals' job satisfaction and associated factors at public health centers in West Ethiopia, Hum. Resour. Health 15 (1) (2017) 36.
- [31] A. Yami, L. Hamza, A. Hassen, C. Jira, M. Sudhakar, Job satisfaction and its determinants among health workers in jimma university specialized hospital, southwest ethiopia, Ethiop. J. Health Sci. 21 (2011) 19–27.
- [32] P.C.O. Ferrinho, The Human Resources for Health Situation in Mozambique, World Bank, Africa Regional Office, Washington, D.C, 2006.
- [33] M.D. Argaw, B.F. Desta, T.A. Bele, A.D. Ayne, Improved performance of district health systems through implementing health center clinical and administrative standards in the Amhara region of Ethiopia, BMC Health Serv. Res. 19 (1) (2019) 127.
- [34] Employ Job Satisfaction and Engagement. Revitalizing a Changing Workforce [https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2016-Employee-Job-Satisfaction-and-Engagement-Report.
- [35] A.A. Medhanyie, A. Little, H. Yebyo, M. Spigt, K. Tadesse, R. Blanco, G.-J. Dinant, Health workers' experiences, barriers, preferences and motivating factors in using mHealth forms in Ethiopia, Hum. Resour. Health 13 (1) (2015) 2.
- [36] F. Ayalew, A. Kols, Y.M. Kim, A. Schuster, M.R. Emerson, J. Roosmalen, J. Stekelenburg, D. Woldemariam, H. Gibson, Factors affecting turnover intention among nurses in Ethiopia, World Health Popul. 16 (2) (2015) 62–74.
- [37] A. Filby, F. McConville, A. Portela, What prevents quality midwifery care? A systematic mapping of barriers in low and middle income countries from the provider perspective, PLoS One 11 (5) (2016)e0153391.