Job Satisfaction and Associated Factors Among Midwives Working in Health Centers of Central Zone, Ethiopia

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Abstract

**Background:** Job satisfaction depends on the interactions of employee's personal characteristics, values and expectations with the work environment and the organization. Low job satisfaction among midwives is supposed to be a problem to achieve organizational goals. Due to this reason, it is a must to determine their level of satisfaction and the contributing factors. The objective is to assess job satisfaction and associated factors among midwives working in Health Centers of Central Zone of Tigray, Ethiopia, 2019

**Method:** An institution-based cross sectional study was conducted on March 2019 at Central Zone of Tigray among 140 midwives selected using simple random sampling. Logistic regression analysis was used to identify factors related to job satisfaction. Variables which have \( p \)-value less than or equal to 0.05 with corresponding AOR at 95 confidence interval was considered to declare the significance association.

**Result:** This study revealed that job satisfaction of health professional working Central Zone of Tigray was 43.57%. Of which respondents’ 92 (65.7%) were females and 128(91.4%) were Orthodox region followers. Majority of the respondents 85(60.7%) were under the age of 30 and almost half 69(49.3%) of the respondents were married. Motivation, management system, and work were identified as significant factors associated with midwives’ job satisfaction level. Regarding motivation, the probability of being satisfied among midwives not motivated to do their job, were 76% times less likely compared to their counterpart, whereas the management system, the probability of not satisfied with the management system were 79.2% times less likely satisfied than who were satisfied with the management system. Work satisfaction, the probability of not satisfied with their work was 91.6% times less likely satisfied than those who were satisfied with their work.

**Conclusion:** Job satisfaction of midwives in central zone health centers was found to be low. Motivation, management system, and work were identified as significant factors associated with midwives’ job satisfaction level.

**Introduction**

Job satisfaction depends on the interactions of employee's personal characteristics, values and expectations with the work environment and the organization throughout their lives (1). The increase in the number of births attended by skilled health personnel is one of the major strategies to minimize maternal and child mortality (2). Low motivation of midwives further exacerbates the situation (3). Satisfaction with jobs largely determines the productivity and efficiency of human resource for health (4).

Job satisfaction of midwives is highly important in building up employee motivation (5). This has the potential to have a negative impact on the delivery of patient care because there is confirmation to suggest that reduction in health professional staff below a certain level is related to poor patient outcomes (6, 7, 8, and 9). Midwives who were dissatisfied at work were found to distance themselves from their patients, resulting in suboptimal quality of care. Dissatisfaction with their work can cause poor job performance, lower productivity, and staff turnover and is costly to organizations. (10).
The negative consequence of less satisfaction is high turnover; costs related to recruitment, orientation of new health professionals; loss of skilled health professionals; periods of short staffing accompanied by tirelessly for remaining midwives, or use of temporary agency staff who are less familiar with the setting than employees; and potential for increase in adverse client outcomes and reduced organizational performance (11, 12, 13). Low job satisfaction among health care providers is supposed to be a problematic. Overall, 86% study subjects were dissatisfied, with about 26% higher dissatisfied with their job (15, 16, 17).

Job satisfaction is a function of numerous variables, including salaries or wages and allowances, the work environment and other non-monetary factors. 40% of public health workers interviewed had moderate satisfaction, neither high nor low and another 40% low and very low job satisfaction, that is, only 20% had high or very high job satisfaction (18). 40% of public health workers interviewed had moderate satisfaction, neither high nor low and another 40% low and very low job satisfaction, only 20% had high or very high job satisfaction. It means that midwives are not satisfied with their jobs (19, 20, 21). There have not been programmed initiatives despite recent deliberate policies aimed at improving and encouraging the career development of health workers (16). Job satisfaction is a construct closely related to motivation; it is a direct result of motivational processes, of which it is the affective component (22).

Dissatisfaction result in tiredness, absenteeism, examination incorrectly, burnout, and excessive turnover have been reported (23). From the total respondents 83.7% of health professionals' have intention to leave the hospital, and about 30.4% of the respondents from the study hospitals have intention of leaving their job because of low government salary scale and seeking better job for better pay, and about 17.4% of the respondents from the study hospitals have reported that low government salary scale force them seeking better job elsewhere for better pay (24, 25).

The world needs midwives than ever, we need to retain the exits. Understanding employee perspectives and measuring their satisfaction factors are critical to an organization's success. It may help public and private organizations, including health centers at Regional and woreda level to be clearly aware of midwife’s job dissatisfaction and related factors in the study area. This may inspire them to go beyond and make some sort of interventions towards alleviating this critical problem. It may help midwives to know their challenges, strengths and weaknesses in the working area.

Objectives

General objective

To assess job satisfaction and associated factors among midwives working in Health Centers of Central Zone of Tigray, 2019

Specific Objectives

To determine job satisfaction among midwives
To identify factors associated with job satisfaction among midwives

**Methods**

**Study area, period, and Design**

Institution-based cross-sectional study design was employed in the Central Zone of Tigray, which is located 1183 K.M North of Addis Ababa, capital city of Ethiopia. Based on the 2014 Census conducted by the Central Statistical Agency (CSA) of Ethiopia this Zone had a total population of 1,245,824, of whom 613,797 were men and 632,027 women; 176,453 or 14.16% were urban inhabitants. There are 3 governmental hospitals and 52 Health Centers. The total number of Health Professionals of this zone is 1320. Among those 167 were midwives. The study was conducted from April 05/2019- May 05/2019 E.C.

**Study Population**

Midwives who have been working with health Centers of Central Zone of Tigray who fulfill the inclusion criteria

**Eligibility Criteria**

**Inclusion for quantitative:**

Midwives who have been working for at least six months of experience in a current Health Centers of Central Zone of Tigray were selected.

**Inclusion for qualitative:**

Purposely selected midwives who have been working for at least two years of experience in a current Health Centers of Central Zone of Tigray

**Exclusion**

Severely ill and annual leave midwives

**Sample Size Determination**

Sample size(n) was determined by using single population proportion with the following assumptions 95% significance level to be 95% Za/2=1.96,5% margin of error (d=0.05), proportion of job satisfaction among midwives(17) 91.% and 10% non response rate.

\[ n = \text{sample size} \]

\[ p = \text{proportion, midwives satisfaction(17).} \]

\[ q = 1 - 0.9 = 0.09 \]
Za/2=critical value at 95%CI of certainty (1.96)

d=marginal error of 0.05.

\[
\begin{align*}
    n &= \frac{(Za/2)^2 \cdot p \cdot (1-p)}{d^2} \\
\end{align*}
\]

\[
\begin{align*}
    n &= (1.96)^2 \cdot 0.91 \cdot (1-0.91) / (0.05)^2 = 127
\end{align*}
\]

Finally, by adding 10% non-response rate the estimated sample size will be: 140

140 midwives were included in the studies who were working in Health Centers of Central Zone of Tigray. Accordingly, 140 midwives were selected for a structured interview. Besides, 7 midwives were selected purposively for semi-structured interviews.

**Sampling technique and procedure**

Purposive sampling technique was employed to include 7 midwives used for qualitative data collection. Besides, 140 midwives were included who fulfill the inclusion criteria for quantitative. Systematic random sampling technique method used from Zonal Health Bureau registration book to filter the study participants for quantitative study. Total midwives in central zone have 421 in number, so every k interval refines the total sample size systematically. Out of the first 3 respondents select from the registration book randomly then select every three interval. Out of which midwives from Zonal Health Bureau registration book were selected and refined to only those who fulfill the inclusion criteria for both quantitative and qualitative study.

**Variables**

**Dependent Variables:** job satisfaction

**Independent Variables**

**Socio–demographic factors:** gender, age, monthly salary, work experience, educational qualification, and marital status; **Management factors:** work appraisal, recognition, supervision, and justice; **Organizational factors:** work environment, resource availability, and incentives; **Job related factors:** autonomy, use of skills, work r/n ship, motivation, training, and work

**Operational definitions of basic terms**

**Job satisfaction:** Being like or unlike a job

**Satisfied:** Satisfaction more than to the mean value (computing all Likert scale variables: justice, physical working environment, availability of resources, work overload, interpersonal relationship, work appraisal,
supervision, decision making, staff-client interaction, incentives, educational opportunity, skill, autonomy, health risks)

**Not satisfied**: Satisfaction less than or equal to the mean value

**Methods of analysis**

Both qualitative and quantitative methods of data analysis were employed. The collected data using structured interview was initially checked, coded, and analyzed using frequency, percentage, mean and standard deviation, after entering into a computer using SPSS version 20.0. The mean scores were calculated for midwives’ job satisfaction sub-scale and the overall satisfaction of those whose scores above the mean were considered as satisfied and those whose score less than or equal to the mean were considered not satisfied. After the normality of the data was checked crude odds ratio was calculated for each exposure variable using 95% CI, then to do the adjusted odds ratio with p value of <0.2 under bivariate analysis entered into multiple logistic regression models in order to identify independent predictors of midwives’ job satisfaction. On the other hand, the collected data using semi structured interview were analyzed with the help of a tape-recorder, transcribed and translated to English then analyzed using thematic analysis. Cut point value of P < 0.05 to say statistically significant.

**Ethical clearance**

The study was done in accordance with the declaration of Helsinki. Ethical clearance was taken from Mekelle University College of Health Science ethical review committees. A formal permission letter was obtained from the Central zone health beurou. Respondents were provided information on the purpose of the study, its procedures and their right to refuse or decline participation in the study at any time. Written informed consent was taken from all study participants after a clear description of the objectives of the study and its procedures by the data collectors before proceeding data collection.

**Result**

**Socio-demographic factors**

The response rate of this study was 100%. Of which respondents’ 92 (65.7%) of the respondents were females. Regarding to their religion, 128(91.4%) were Orthodox. The table also revealed that 85(60.7%) of the respondents were under the age of 30 and 30-40 age of the respondents were 31(22.1%). 69(49.3%) and 41(29.3%) of the respondents were married and single respectively. Regarding to their educational qualifications, the majority 122 (87.1%) were diploma holders. We saw 73 (52.1%) of the respondents work experience was less or equal to five years and nearly half of the respondents get monthly salary of >2000 birr per month (Table 1).

Table 1.Distribution of job satisfaction related variables among midwives working in central zone Health Centers, 2019
### Variables

| Variables                  | Category     | Frequencies | Percentage |
|----------------------------|--------------|-------------|------------|
| Sex                        | Male         | 48          | 34.3       |
|                            | Female       | 92          | 65.7       |
| Religion                   | Orthodox     | 128         | 91.4       |
|                            | Muslim       | 12          | 8.6        |
| Age                        | <30          | 85          | 60.7       |
|                            | 30-40        | 31          | 22.2       |
|                            | >40          | 24          | 17.1       |
| Marital status             | Married      | 69          | 49.3       |
|                            | Single       | 41          | 29.3       |
|                            | Divorced     | 17          | 12.1       |
|                            | Widowed      | 13          | 8.3        |
| Educational qualification  | Diploma      | 122         | 87.1       |
|                            | BSc          | 18          | 12.9       |
| Work experience            | <5           | 73          | 52.1       |
|                            | 5-10         | 55          | 39.3       |
|                            | >10          | 12          | 8.6        |
| Monthly salary (ETB)       | ≤2000        | 68          | 48.6       |
|                            | >2000        | 72          | 51.4       |

**Distribution of job satisfaction related variables**

Respondents were requested about variables related to job satisfaction. Accordingly, 60 (42.9%) of the respondents replied that there was adequate training in their institution. Whereas, 80 (57.1%) were agreed that there was no adequate training. Similarly, the response obtained from in-depth interview, two midwifery's interviewees replied; *...There is no adequate training given in this health center; even when training programs are arranged by other concerned bodies, the chance is given to others out of the department.*

Respondents were also requested regarding to their salary. Accordingly, the finding revealed that 120 (85.7%) of the respondents were not satisfied. The data which was also obtained by the use of in-depth interview showed that almost all participants were not satisfied with their monthly salary. In supporting this view, a 25 year working experiences midwife stated:
We are dissatisfied with our salary as well as duties and risk payments. We are working half of the health center activities. We work more than 20 hours per day and the payment is not delivered accordingly. We have children and we are working only for the sake of feeding them and to sustain our lives. We still ask for the betterment of our payment, though no change is being made. It is already known that the risk and duty payment of each individual is 470 birr per month and 80 birr per day respectively. But no one can be paid according to the standard and taxed 30% together with our salary: surprisingly, we get only 8 hours duty per day.

Regarding to motivation, the finding revealed that 72 (51.4%) were not motivated to do their job in their health center. Similarly, one midwives stated: …... There is no any significant motivator given to ours …... Even, midwives are just lumped as a nurse.

Concerning the management system, 93 (66.4%) of the respondents were not satisfied with the management system of the health centers. The rest, 47 (33.6%) were satisfied. Respondents were requested about the availability of equipment in their health center. Accordingly, 80 (57.1%) of the respondents replied that the health center equipment was not fulfilled. In the same way, one MCH case team coordinator midwives said: … Some midwives work with only one glove; work with no antiseptic, not supported by the system, but because of passion; few midwives planned to leave the profession to do their own private business, because they have lost satisfaction in the profession.

A single item was prepared to measure midwives related to their work that they are providing to their customers. Accordingly, the response obtained from the majority of respondents showed that 88 (62.9%) were not satisfied with the work they are providing. The remaining, 52 (37.1%) were satisfied (Table 2)

Table 2. Distribution of job satisfaction related variables among midwives working in central zone Health Centers, 2019
| Items                                           | Response | Frequency | Percentage |
|------------------------------------------------|----------|-----------|------------|
| Is there adequate training for your job?       | No       | 80        | 57.1       |
|                                                | Yes      | 60        | 42.9       |
| Is your monthly salary adequate?               | No       | 120       | 85.7       |
|                                                | Yes      | 20        | 14.3       |
| Are you motivated to do your job?              | No       | 72        | 51.4       |
|                                                | Yes      | 68        | 48.6       |
| Are you satisfied with the management system?  | No       | 93        | 66.4       |
|                                                | Yes      | 47        | 33.6       |
| Is there adequate equipment to do your job?    | No       | 60        | 42.9       |
|                                                | Yes      | 80        | 57.1       |
| Are you satisfied with the work that you are providing to your customers? | No | 88 | 62.9 |
|                                                | Yes      | 52        | 37.1       |

**Results of job satisfaction variables**

Respondents were requested to rate the level of their satisfaction to their job. Accordingly, regarding to fair distribution of justice, 50 (35.7%) and 26 (18.6) of the respondents were very dissatisfied and dissatisfied respectively. On the other hand, 52 (37.1%) respondents were satisfied. With regard to the physical working environment, the finding depicts 40(28.6%) respondents were satisfied. Whereas 48(34.3%) were very dissatisfied and 33 (23.6%) were dissatisfied.

Regarding to the availability of resources as indicated in table 3 below, the finding showed that, 59 (42.1%) and 31 (22.1%) of the respondents were very dissatisfied and dissatisfied respectively. On the other hand, 37 (26.4%) were satisfied. Similarly, on the qualitative study one midwife interviewee replied:

*One day a laboring mother was coming to our health center for delivery service. During this time there was no network to communicate with other professionals for support. I diagnosed that case CPD, so the best management was referring the mother, but there was no ambulance service. Due to the severity of the problem, I went to Axum on my bare foot to call the ambulance at 7:00 o clock at night. This and other factors make me very dissatisfied with my job.*

With regard to work overload, almost half, 71 (50.7%) of the respondents were very dissatisfied whereas 35 (25%) of the respondents were dissatisfied. One midwife interviewee on the qualitative study was also replied:
We work a lot and engaged in labor and delivery, ANC, family planning, under five, and immunization. We are always on duty on behalf of our colleagues when they leave for break and when they are asking sick leave. This is mainly due to less number of midwives in our health center.

Respondents were also asked regarding the level of their interpersonal relationship. 31 (22.1%) of the respondents were very satisfied while 39 (27.9%) and 20 (14.3%) were dissatisfied and very dissatisfied respectively. Similarly, on the qualitative study, one midwife said

..... Midwives don't have good interaction with other groups. Particularly, we don't have a smooth relationship with our heads; they are fault finders. Since labor is unpredictable, mothers sometimes get birth at their home after they have been checked in our health center. If so, our heads demoralized and gave us a written warning. For instance, due to the above reason our heads gave a written warning for two of my friends including me.

Regarding the supervision made by higher officials, the finding revealed that 45 (32.1%) and 28 (20%) of the respondents were very dissatisfied and dissatisfied respectively. 41 (29.3%) respondents were satisfied with the overall supervisory practice done by higher officials. In relation to midwives’ participation in decision making, 45 (32.1%) of the respondents were very dissatisfied. Whereas, 76 (54.2%) of the respondents were satisfied. Regarding to staff-client interaction, 34 (24.3%) and 62 (44.3%) of the participants were satisfied and very satisfied respectively. On the other hand, 27 (19.3%) of the respondents were dissatisfied (Table 3).

Table 3. Results of job satisfaction variables among midwives who were working in Central Zone Health Centers, 2019.
| Variables                                      | Very Dissatisfied | Dissatisfied | Neither | Satisfied | Very Satisfied |
|------------------------------------------------|-------------------|--------------|---------|-----------|----------------|
|                                                | Freq (%)          | Freq (%)     | Freq (%)| Freq (%)  | Freq (%)       |
| Fair distribution of justice                   | 50(35.7)          | 26(18.6)     | 4(2.9)  | 52(37.1)  | 8(5.7)         |
| Physical working environment                   | 48(34.3)          | 33(23.6)     | 6(4.3)  | 40(28.6)  | 13(9.3)        |
| Availability of resources                      | 59(42.1)          | 31(22.1)     | 8(5.7)  | 37(26.4)  | 5(3.6)         |
| Work overload in relation to the number of staff | 71(50.7)          | 35(25.0)     | 4(2.9)  | 21(15.0)  | 9(6.4)         |
| Interpersonal relationship between co-workers | 39(27.9)          | 20(14.3)     | 5(3.6)  | 45(32.1)  | 31(22.1)       |
| Work appraisal by the heads                    | 52(37.1)          | 34(24.3)     | 4(2.9)  | 32(22.9)  | 18(12.9)       |
| Supervision made by heads                      | 45(32.1)          | 28(20.0)     | 3(2.1)  | 41(29.3)  | 23(16.4)       |
| Staff involvement in decision making           | 45(32.1)          | 14(10.0)     | 5(3.6)  | 45(32.1)  | 31(22.1)       |
| Staff interaction with clients                 | 27(19.3)          | 13(9.3)      | 4(2.9)  | 34(24.3)  | 62(44.3)       |
| Incentives                                     | 82(58.6)          | 22(15.7)     | 7(5.0)  | 21(15.0)  | 8(5.7)         |
| An educational opportunity                     | 92(65.7)          | 28(20.0)     | 3(2.1)  | 10(7.1)   | 7(5.0)         |
| Applying your skill in the working area        | 25(17.9)          | 14(10.0)     | 7(5.0)  | 55(39.3)  | 39(27.9)       |
| Job autonomy                                   | 58(41.4)          | 13(9.3)      | 3(2.1)  | 37(26.4)  | 29(20.7)       |
| Working environment free from health risky situations | 82(58.6)          | 22(15.7)     | 2(1.4)  | 21(15.0)  | 13(9.3)        |
| Over all job satisfaction level                | Satisfied         | 61(43.57%)   |         |           |                |
|                                                | Not satisfied     | 79 (56.43%)  |         |           |                |

Regarding to educational opportunity, the majority of respondents 92(65.7) and 28(20.0) were very dissatisfied and dissatisfied respectively. Whereas 10 (7.1%) were satisfied. On the qualitative result from one interviewee:

........ There is no any opportunity for further education; few of them start to upgrade their education by their own. Sometimes when we are starting to learn by ourselves higher official gave a written warning. Even we are also upset by other people sayings like “there is no need of learning more than diploma and no need of more than two midwives in one health center!!” This leads us job dissatisfaction.
Respondents were requested whether they were applying their skills in their work they are assigned. Accordingly, the finding revealed 39 (27.9%) of the respondents were satisfied. On the other hand, 25 (17.9) % of the respondents were very dissatisfied. Regarding job autonomy, 37 (26.4%) of the respondents were satisfied. Whereas 58 (41.4%) of the respondents were very dissatisfied. In the same vein, two midwives stated that few health officers interfere in our work.

Respondents were also requested whether the working environment is free from health risky situations. Accordingly, 82 (58.6%) and 22 (15.7%) of the respondents were very dissatisfied and dissatisfied respectively. Similarly, one midwife stated:

... Midwife is risky job; nobody loves MCH. We wash our body with blood, amniotic fluid and vaginal secretion. No one gives due attention to our lives, risk and others. After doing certain activities we feel bad. One day, the cord detached and flushed with my face. This makes me fear of HIV, HBV and others.

The mean value of overall satisfaction is 38.2 with a standard deviation of 12.3. With this value, equal or less than this mean value was categorized as not satisfied and more than this mean value was satisfied. Based on this value the overall job satisfaction of midwives using Likert scale question items, the finding revealed, 61 (43.57%) were satisfied, the remaining 79 (56.43%) were not satisfied. Two midwifery participants during semi structured interview said:

.... I am dissatisfied with my job due to professional bias. Even though midwifery was my choice, due to different factors I am very disappointed; I considered myself below other health professionals. Other people also perceive midwifery as less interesting department than other health professions. We also hate our profession. ..... Midwifery is the lowest job from the alternative professions. There is no any midwife expert who evaluates, comment and give feedback for the program in general and for us in particular.

From all measuring Likert scale variables, the lowest levels of job satisfaction are obtained from educational development (Mean = 1.66 ±1.143) followed by the salary (Mean = 1.14 ±0.351) and then workload (Mean = 1.94±1.326). The highest level of satisfaction was get from applying their skills in the working areas.

Based on this value the overall job satisfaction of midwives using Likert scale question items, the finding revealed, 61 (43.57%) were satisfied, the remaining 79 (56.43%) were not satisfied. Two midwifery participants during in-depth interview said figure 1):

.... I am dissatisfied with my job due to professional bias. Even though midwifery was my choice, due to different factors I am very disappointed; I considered myself below other health professionals. We also hate our profession. ..... Midwifery is the lowest job from the alternative professions. There is no any midwife expert who evaluates, comment and give feedback for the program in general and for us in particular.

Factors associated with job satisfaction
Job satisfaction results of the bivariate analysis result like socio demographic factors, training, salary, motivation, management system, equipment, and work. From those variables motivation, management system, and work in the multivariate analysis were again statistically significant for the overall satisfaction. Regarding motivation with the overall satisfaction, the probability of being satisfied with their job among midwives with not motivated to do their job were 76% times less likely compared to their counterpart [AOR=0.24; 95% CI (0.087, 0.665)]. When we see the management system in relation to the overall satisfaction, the probability of not satisfied with the management system were 79.2% times less likely satisfied with their job than those who were satisfied with the management system [AOR, 0.208, 95% CI, (0.074, 0.583)]. On the other variable which was the most statistically significant from the alternative in multivariate analysis was work satisfaction, the probability of not satisfied with their work was 91.6% times less likely satisfied with their job than those who were satisfied with their work [AOR=0.084; 95%, CI (0.03, 0.234)] (Table 4) .

Table 4.Factors associated with job satisfaction among midwives who are working in Central Zone of Tigray, 2019
## Variables for health center midwives

| Variables for health center midwives | Overall Satisfaction | COR (95% C.I.) | AOR (95% C.I.) |
|-------------------------------------|----------------------|----------------|----------------|
|                                     | Satisfied           | Not satisfied  |                 |
|                                     | No (%)               | No (%)         |                 |
| **Sex**                             |                      |                |                 |
| Female (ref)                         | 41 (44.6)            | 51 (55.4)      | 1.125 (0.556, 2.280) |
| Male                                | 20 (41.7)            | 28 (58.3)      |                 |
| **Religion**                         |                      |                |                 |
| Muslim (ref)                         | 6 (50)               | 6 (50)         | 1.327 (0.406, 4.339) |
| Orthodox                            | 55 (43)              | 73 (57)        |                 |
| **Age**                              |                      |                |                 |
| <30                                  | 38 (44.7)            | 47 (55.3)      | 0.956 (0.385, 2.373) |
| 30-40                                | 12 (38.7)            | 19 (61.3)      | 0.746 (0.253, 2.199) |
| >40 (ref)                           | 11 (45.8)            | 13 (54.2)      |                 |
| **Marital status**                   |                      |                |                 |
| Married                              | 28 (40.6)            | 41 (59.4)      | 0.956 (0.276, 3.318) |
| Single                              | 21 (51.2)            | 20 (48.8)      | 1.470 (0.400, 5.398) |
| Divorced                            | 7 (38.9)             | 7 (58.3)       | 0.891 (0.201, 3.946) |
| Widowed (ref)                       | 5 (41.7)             |                |                 |
| **Educational qualification**        |                      |                |                 |
| Diploma                             | 52 (42.6)            | 70 (57.4)      | 0.743 (0.276, 2.002) |
| BSc (ref)                           | 9 (50)               | 9 (50)         |                 |
| **Work experience**                  |                      |                |                 |
| <5                                  | 32 (43.8)            | 41 (56.2)      | 1.093 (0.317, 3.766) |
| 5-10                                | 24 (43.6)            | 31 (56.4)      | 1.084 (0.306, 3.842) |
| >10 (ref)                           | 5 (41.7)             | 7 (58.3)       |                 |
| **Monthly salary**                  |                      |                |                 |
| ≤2000                               | 29 (42.6)            | 39 (57.4)      | 0.929 (0.476, 1.814) |
| >2000 (ref)                         | 32 (44.4)            | 40 (55.6)      |                 |
| **Training**                        |                      |                |                 |
| No                                  | 26 (42.1)            | 54 (68.4)      | 0.34 (0.17, 0.69)* |
| Yes (ref)                           | 35 (57.9)            | 25 (31.6)      | 0.706 (0.268, 1.858) |
| **Salary in relation to Workload**  |                      |                |                 |
| No                                  | 45 (73.8)            | 75 (94.9)      | 0.15 (0.047, 0.477) ** |
| Yes (ref)                           | 16 (26.2)            | 4 (5.1)        | 0.699 (0.161, 3.032) |
Motivation

|       | No       | Yes (ref) | p-value     | OR (95% CI) |
|-------|----------|-----------|-------------|-------------|
|       | 16(26.2) | 45(73.8)  | 0.146(0.069,0.309)*** | 0.240(0.087,0.665) * |

Management system

|       | No       | Yes (ref) | p-value     | OR (95% CI) |
|-------|----------|-----------|-------------|-------------|
|       | 36(76.6) | 25(26.9)  | 0.112(0.050,0.254)*** | 0.208(0.074,0.583) * |

Equipment

|       | No       | Yes (ref) | p-value     | OR (95% CI) |
|-------|----------|-----------|-------------|-------------|
|       | 16(26.7) | 45(56.2)  | 0.283(0.137, 0.583)** | 0.768(0.278, 2.78) |

Work

|       | No       | Yes (ref) | p-value     | OR (95% CI) |
|-------|----------|-----------|-------------|-------------|
|       | 19(21.6) | 42(80.8)  | 0.0656(0.028,0.154)*** | 0.084(0.03,0.234)**|

Key

* p ≤ 0.05, ** p ≤ 0.001, *** p ≤ 0.000

Ref= reference

Discussion

The finding revealed that 79 (43.57%) midwives were satisfied with their job. The reasons obtained mainly from educational development (Mean = 1.66 ± 1.143) followed by the salary (Mean = 1.14 ±0.351) and then workload (Mean = 1.94±1.326). Variables in the multivariate analysis like motivation, management system, and work satisfaction were statistically significant for the overall satisfaction under multivariate analysis (p<0.5). Socio-demographic variables were not statistically significant. Less than half midwives were Satisfied with their job. The result obtained from the qualitative study also supported this result that majority of the participants were dissatisfied with their job. For instance, one case team coordinator midwife replied

"......... I am dissatisfied with my job. Most people hate our job and always say you are not a health professional. Always one activity: always similar thing: illiterate can do your job!!"

Similarly, another midwifery interviewee stated

"... Our profession is never respected by other groups of the society. Some people dislike our profession as well as our job and repeatedly says “midwife is exactly like a goalkeeper......”. This in turn makes us very dissatisfied. ..... Majority of midwives is dissatisfied with their job as well as other intervention programs like duty payment, work load, educational opportunity evaluation system, professional bias, recognition given to them by other groups of the society........."

Both the qualitative and the quantitative results of this study showed that midwives were less satisfied with their job. It seems consistent study in Jimma (14). This similarity is there may be similar health policy,
work load, payment and training opportunity. On the other side this finding seems inconsistent with many other research findings in different countries. For instance, the research work in Iran showed 38.9% of midwives were not satisfied with their job (8). In Pakistan overall, 86% study subjects were dissatisfied (15). In turkey the percentage of satisfied health care workers was 60% and midwives had the lowest satisfaction scores (12). This inconsistent between this result and literatures may be due to some item difference for the overall satisfaction and the areas covered by the study and economic status difference. Even though the level of satisfaction was different, areas of most dissatisfaction were similar.

Regarding the significant variables in the multivariate logistic regression management system, motivation and work satisfaction were statistically significant. With analysis result of motivation the probability of being satisfied among midwives with not motivated to do their job were 76% times less likely compared to their counterpart [AOR=0.24; 95%, p≤ 0.5), CI (0.087, 0.665)]. It indicated that motivation affected the overall satisfaction of midwives. This result supported by the qualitative study one midwifery interviewee replied that:

   .... There is no any motivation given to us including job autonomy.

In supporting this, one other midwife also replied

   .... there is no any form of motivation for midwives. Midwives are inadequately motivated, we have no promotional outlets specifically as a midwife from the lowest to highest cadre as a specialty; midwives are just lumped as a nurse....

Midwives who were doing with motivation in central zone health center are statistically significant with their overall job satisfaction. So, motivation highly affects midwives job satisfaction which has statistically significant with the overall satisfaction (P<0.5). It seems consistent study in Jimma hospital on health workers dissatisfied with motivation of staffs (14). Work is statistically significant with overall satisfaction (P = 0.016) (28). The similarity may be due to similar sample size, salary, benefit, risk and similar health policy.

Majority of the participants were not satisfied with the management systems of the health centers. The other significant variable for overall job satisfaction in the multivariate regression was management system. The probability of midwife's satisfaction who were working in health centers not satisfied with the management system was 79.2% times less likely satisfied than those who were satisfied with the management system. With supporting this result on the qualitative study one midwife replied

   As a midwife as well as a program coordinator, I am dissatisfied with the management systems of this health center. Management bodies are not willing to solve problems together. They denied our right. They are not involving us in a management system to decide even the issue is concerned us.......

Similarly, a study in Jimma hospital also indicated that the majority of the participants were not satisfied with the management system of their hospitals, but it is not statistically significant with the overall satisfaction. The finding of this literature study indicated that the majority of the respondents were not
satisfied with the management system of their respective institution (14). This inconsistency may be due to different analysis method, and technical management system.

Majority of the respondents were not satisfied with their work that they are providing. From those variables which entered into multivariate, the most statistically significant variables from the alternative in multivariate logistic regression were work. The probability of satisfied with their work were 91.6% times less likely satisfied with their work than those who satisfied with their current work.

The above result is supported by qualitative study, one midwife participant during semi-structured interview session stated:

……. *Distance between health centers and towns, transportation problem, scarcity of working rooms, shortage of water, budget constraints, scarcity of electricity and absence of telephone are the major barriers that hinder the service delivery. This makes me dissatisfied with my work.*

This result seems inconsistent with a study conducted in the Turkey the proportion of health care staff satisfied with their work statistically significant with the overall satisfaction, midwives had the lowest satisfaction scores (P < 0.05) (12). This result seems consistent with a study in Jimma health worker respondents felt not satisfied from the work they do (8). A consistent finding in Gondar with their work explained the overall job satisfaction (29). The assumption could be helping a person in labor may give satisfaction which showed that helping mothers in the case of severe pain was the main reason for their job satisfaction.

Socio-demographic variables of this study were not statistically significant with the overall satisfaction. The findings revealed that demographic factors were not linked to job satisfaction. This is consistent with other research, a number of such as age; gender, marital status, and work experience of the profession (P > 0.05) were not linked to the overall job satisfaction (12). The other consistent study in Jimma hospital of health workers, However, there was no statistically significant association between overall job satisfaction and socio-demographic variables (p ≥ 0.05) (14)

**Strength And Limitations Of The Study**

Use of mixed methods (both qualitative and quantitative). The study is not inclusive. Midwives in different Hospitals of the zone were not included on the assumption that the problem may be much more sever in health centers. Purposive sampling method used for qualitative data that may result bias and it might not represent the whole population.

**Conclusions**

The overall job satisfaction of midwives in central zone health centers was coming low. This result showed that majority of midwives is not satisfied with their job in the study area. The reasons for this low satisfaction score of midwives were low educational opportunity, inadequate incentive, low work appraisal, scarcity of resources, poor physical working environment, high workload, low supervision, and poor job
autonomy. From this result we conclude that better educational opportunity, reducing work load, better supervision and giving job autonomy increase the overall job satisfaction of midwives.

Overall job satisfaction of midwives was greatly affected by management system, motivation and work. This factor was statistically significant for the overall job satisfaction of midwives in their working area. Therefore improving the management system, motivation and working condition likely to increase the overall job satisfaction of midwives. In this study socio-demographic variables were not affecting the overall job satisfaction.

Recommendation

Based on the findings of the study, the following possible recommendations are better forwarded to improve job satisfaction of midwives.

Regional Health Bureau

- The regional health bureau better to identify the gaps and needs of midwives so as to give further educational opportunity.
- The regional health bureau better to reduce workload of midwives.
- The regional health bureau better to increase midwife’s salary
- The regional health bureau should arrange different intervention programs to create a good management system in the working area.
- Health managers better to improve regular supervision to assess the service delivery in health centers

Woreda Health Bureau

- The woreda health bureau is better to reduce workload of midwives.
- The woreda health bureau better to allocate the necessary resources for its own health center.
- The woreda Health Bureau better to arrange different intervention programs to create a good management system in the working area.
- Woreda health bureau arrange different intervention programs to satisfy midwives with their work by identifying gaps
- Health managers better to improved regular supervision to assess the service delivery in health centers

Health Centers

- Health centers better to allocate the necessary resources for its own health center.
- Health centers better to provide incentives for midwives
- Health center managers better to improved regular supervision to assess the service delivery in health centers
- Health center managers better to give job autonomy for midwives
The health centers should arrange different intervention programs to create a good management system and interpersonal relationship in the working area.

The health center heads better to identify the motivating factors of midwives and better to address motivation of midwives.

The health centers better try to solve scarcity of resources.

Health centers better to create a good working environment.

Health centers better to arrange different intervention programs to satisfy midwives with their work.

Abbreviations

AOR ——— Adjusted odds ratio
ANC ——— Antenatal care
COR ——— Crude odds ratio
SPSS ——— Statistical package for social sciences
WHO ——— World health organization

Declarations

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Availability of data and materials

“The dataset will not be shared in order to protect the participants’ identities”.

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Author's contribution

BT conceived and designed the study, performed analysis and interpretation of data. AT and TA supervised the design conception, analysis, interpretation of data and made critical comments at each step of research. All of us drafted the manuscript. All authors read and approved the final manuscript.

Declarations

Ethics approval and consent to participate

The Study was reviewed and approved by the Mekelle University ethical clearance committee. All participants were informed of the aim of the study and their full right to withdraw or refuse to participate before their verbal consent was obtained.

Competing interests

The authors declared that no conflict of interest

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Figures
Figure 1

Figure 1