Perception of Health Workers towards Teamwork in Jimma Zone Public Hospitals, South West Ethiopia

By: Kenea Mekonnen (BA)

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Jimma, Ethiopia

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By: Kenea Mekonnen (BA)

Advisors: **Mr. Waju Beyenne (Assoc. Professor)**

Mr. Tesfamchael Alaro (Assis. Professor)

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ABSTRACT

Background: *An effective teamwork is now internationally accepted as an essential tool for constructing a more effective and patient-centered health care delivery system. The incorporation of sharing responsibilities with accountability between team members in health care systems offers great benefit. In Ethiopia, however, the issue of health workers perception towards teamwork is given little attention by researchers where many new public hospitals were opened in the recent time.*

Objective: *To determine the level of perception toward teamwork and its predictors among health workers working in jimma Zone public hospitals Oromia regional state, south west Ethiopia, 2018.*

Methods: *Community based cross-sectional study design was employed to determine the level of perception toward teamwork and its predictors among health workers in Jimma Zone six public hospitals. The study included selected health workers who served at least for 6 months in Jimma zone public hospitals. The data was collected from 249 selected health workers computed by using single population proportion formula It was collected using semi-structured self-administered pre-tested questionnaires of selected health workers from August 13 to September 02, 2018. Data entry and analysis was made using Epi-Data version 3.1 and statistical package for social science version 23 software respectively. Descriptive statistics, binary and multiple variable logistic regression analysis were performed. Finally, variables with a P-values <0.05 were considered as statistically significant at 95% CI.*

Results: *This study finding showed that, 249 health workers were participated with response rate of 249(100 %). Among the total participants 52.6% perceived teamwork positively while 47.4% view teamwork unfavorably. The overall mean perception toward teamwork was 3.59.*

The most important significant variables on multivariable logistic regression analysis, Type of profession were statistically associated with perception of team work [AOR=0.216 and 95% CI= (0.076, 0.610)]. This implies that professionally midwifery health workers were 0.216 times less likely to had negative perception than those who had medical doctors. Work experience were statistically associated with perception of team work [AOR=1.357and 95% CI= (1.067, 1.888)]. This implies that health workers who had greater than 12 years' work experience were 1.357times less likely to had negative perception than those who had work experience less than 2 years

Conclusion: *This study found that significant numbers of the health workers perceived teamwork unfavorably. There was poor practice on the core components of teamwork. This in turn implies that collaborative practice can improve health service delivery but different perception of teamwork negatively affected the interest of health workers to implement it. Hence, there should be a collaborative work to the implementation of policy and strategies that enables hospitals to better practice teamwork approach and to enhance interdisciplinary support for effective and patient-centered health service delivery.*

Key Words: *Teamwork, Health Workers, Public Hospitals, Perception*

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ACRONYMS

AOR   Adjusted odd ratio

COR   Crude odd Ratio

FMOH   Federal Ministry of Health

HAD   Hospital Development Army

HSDP   Health Sector Development Program

HWF   Health workers

ICUs   Intensive Care Units

JUSH   Jimma University Specialized Hospital

RHBs   Regional Health Bureau

SW   South West

TPQ   Team Perception Questionnaire

USA   United States of America

VHA   Veterans Health Administration

ZHD   Zonal Health Depar3tment

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

An effective teamwork is now globally accepted as vital tool for building a more effective and patient-centered health care delivery system. The use of health care teams, to achieve quality and efficient patient care, has become widespread. With the increasing costs and technological complexity of providing health care, and the resultant growth in specialization of professionals, there is a need to co-ordinate scarce human and financial resources to maximize patient outcomes. Hence, policy documents and articles have been emphasized the importance of teamwork in health care globally and in Ethiopia (1).

A team is defined as a collection and distinguishable set of two or more people who interact adaptively, interdependently and dynamically towards a shared goal/objective/ mission, who have been assigned specific roles/functions to perform (1, 2). The concept of team approach in health care institutions in Ethiopia dated back to the mid of 1950's with the establishment of Gondar Public Health College and Training Center, which trained competent health team, composed of Health Officers, Community Nurses, and Sanitarians (3)

Failures in building effective teamwork or collaborative practice have its own effect on health service delivery. Given the inappropriate use of medical resources, limited access to medication and security measures, increased focus should be applied to strategies that promote collaborative practice or teamwork (4). Particularly, health providers' perception is vital for team building and practicing teamwork.

Studies in the area of teamwork indicate that if health and social care for people were to be of the highest quality and efficiency, teamwork is vital. A study of Veterans Health Administration hospitals found that teamwork culture was positively associated with overall patient satisfaction (6). Another study identify that hospitals with higher teamwork culture ratings had lower nurse or physician resignations rates (7). These positive findings showed that how teamwork contributes in the health service delivery.

On other hand, other studies identified that poor teamwork within hospitals may have an adverse effect on financial performance, as a result of in deficiencies (8). Moreover, in practice, teamwork without high-quality can result in immediate risks for patients, and brought legal accountability on health providers (2).

A study in USA also found differing in perceptions towards teamwork because different expectations in teamwork (9).These review show that teamwork should be purposeful to bring the expected results for customers and service providers(9).

1.2. Statement of the Problem

Despite all the efforts made the question of whether health workers team effort can impact the quality of the health service is still not clearly figured out. In this regard, the Federal Hospital Performance Monitoring and Improvement Manual exposed that improvement in quality of health services at every location is still not perceived, generally (9). Although improving the quality of health service is a complex process in which many inputs interact, the health workers' role and their perception about teamwork can affect the service quality. Studies showed that, in practice, teamwork without high-quality can result in immediate risks for patients, and brought legal accountability on health providers (2).

On the other hand, a study conducted in USA showed that part of the difficulty in achieving teamwork in problem solving is that staff members sometimes have different perceptions of what teamwork is. Differing perceptions cause different expectations. Thus, in attempting to achieve teamwork, leaders and members often must deal with a wide spectrum of views and sometimes inflexible, inaccurate perceptions (9). Another study, involving interviews of resident physicians about recent medical mishaps, found that communication failures contributed to 91% of the adverse event they reported (12).

Evidence further illustrates that effective teamwork does not arise spontaneously, but rather requires specific skills and development. There are several barriers which can lead team to ineffectiveness including poor leadership, lack of decision making, inadequate participation, unclear or irrelevant goals, poor conflict resolutions, organizational culture. (7-9). One of the most important components of the process was understanding what practices are employed in the

current practice. Without understanding the roles of other health care professionals, the process would be a significant challenge.

Generally, these and more studies related to teamwork in hospitals have been conducted mostly in developed countries and published abroad. Very few studies conducted in Africa. In Ethiopia, however, such studies are also very rare and in Jimma zone public hospitals are none as far as the researcher's assessment is concerned although there are case teams with different number of health workers and professionals. The studies conducted in our country have given less attention to the perceptions of health workers towards teamwork. Hence, in order to fulfill this gaps this study is intended to assess the perception of health workers towards teamwork in public hospitals of Jimma Zone, South West Ethiopia.

1.3. Significance of the Study

This study will contribute to the improvement of effective work teamwork and brings quality health care services. The study will provide with information for health sectors, Oromia health Bureau, Ethiopia Ministry of Health, other stakeholders and researchers on how health workers perceived teamwork in health care services.

Moreover, it helps current health care teams to deal with the major problems of effective health care teamwork and to prepare future health care teams to lead in the face of these challenges; understanding and acquiring knowledge about the situation is critically needed.

Also, will help policy makers to develop new alternative policy and guidelines on teamwork and initiated to address and manage current health care problems. The study also provide information for future research investigation in the study area.

CHAPTER TWO: LITERATURE REVIEW

2.1. Overview

The socio- demographic characteristic of clients and their perception of quality of care play a major part in people's decision making process especially in service utilization. This study assesses the relationship between clients' socio-economic features as well as the perceived quality on health care utilization .The Socio demographic characteristics consider the location of the people, the income levels, religion, educational levels, ethnicity, and other social and cultural (1).

The concept of team approach in health care institutions in Ethiopia dated back to the mid of 1950's with the establishment of Gondar Public Health College and Training Center, which trained competent health team, composed of Health Officers, Community Nurses, and Sanitarians. (3).

It has been recognized that teamwork among healthcare providers is essential for patient safety. The institute of Medicine (international of medicine) study was one of the first studies which pointed the need for enhanced teamwork in healthcare to avoid patient errors (10). The importance of teamwork in health care has been emphasized in numerous reports and policy documents on the National Health Service. One (NHSME) (11) particularly emphasized the importance of teamwork if health and social care for people are to be of the highest quality and efficiency:

'The best and most cost-effective outcomes for patients and clients are achieved when professionals work together, learn together, engage in clinical audit of outcomes together, and generate innovation to ensure progress in practice and service.'
Over the last thirty years, this has proved very difficult because of the barriers between professional groupings. In the early 1990s in the UK and the USA the Patient Care Pathway are being used and increasingly structured, multi-disciplinary team plans throughout the developed world. The care pathway model need well coordination and communication support from interdisciplinary team members to provide quality services and reduce the chance of mortality (12). Under this section core components of teamwork will be reviewed by categorizing into

team structure, leadership, situation monitoring, mutual support and communication in order to assess the perception of health workers towards team working.

2.2. Core Components of Teamwork

2.2.1. Team Structure

Team structure refers to the identification of the components of a multi-team system that must work together effectively to ensure patient safety. It shows the composition of the teams, i.e. who will be the team members. Studies show that team's structure differs depending upon its purpose, its task, its setting, the mix of professions on the team, and the formal relationships between health professionals on the team (13). This is not simply a matter of the skills required to perform the task, but also raises questions of variety in functional background and balance in demographic characteristics such as background culture, gender, age and even personality.

A study conducted in Nigeria, Anambra state and Delta State, showed that team structure /size, recognition, managing the team, ability to perform, accountability, temperament, managing stress, creating the environment, defined common purpose, measureable goals goals/objectives, effective leadership, good cohesion/ commitment to team, mutual respect and effective communication is an important factor that make a team effective as revealed by 81.9% of the Delta State respondents (14).

A key aspect of team structure is the nature of the task that the team is required to do. The goals should be clear, the task should be motivating and team members should have clear feedback on how effective their performance has been. It also refers to effective team leadership, as we have emphasised above, and the need to appoint team leaders who know how to lead teams and are not hierarchical, traditional supervisors (13).

2.2.2. Leadership

Leadership is the ability to maximize the activities of team members by ensuring that team actions are understood, changes in information are shared, and team members have the necessary resources. The more complex and dynamic the team's task in health service provision, the more a leader is needed. There is considerable research evidence that leaders affect team performance.

Findings from the Health Care Team Effectiveness Project in UK showed that lack of clear leadership is associated with poor team working. Teams without clear leadership report lower levels of participation, lack of clarity about objectives, low commitment to quality of care and low support for innovation in quality of care. Lack of clear leadership was also associated with high levels of stress amongst team members (11). The most important organizational factor supporting team based health care is institutional leadership that fully and unequivocally embraces and supports these principles in word and action (13).

Other studies investigated the relationship between team members' perceptions of leader reward and punishment behaviours and team cohesiveness, drive and productivity. Results showed that both leader contingent reward and punishment were positively related to team drive and productivity (13, 14).

There is also widespread agreement that effective teams require a clear leader, and these teams recognize that leadership of a team in any particular task should be determined by the needs of the team and not by traditional hierarchy. For example, the Mount Sinai palliative care team identified the need to improve a weekly clinical care meeting. They identified the main goal for the meeting: addressing complex patient issues in a context that ensured that each team member had an equal voice. The team assessed the training and skillsets of all team members, and, based upon the goal, determined—somewhat surprisingly, yet successfully—that the chaplain was the best person to run the clinical care meeting. This example nicely illustrates that being an effective team leader for a particular task (like running a team meeting) can require a set of skills that are distinct from those required for making clinical decisions (14).

2.2.3. Situation Monitoring

Situation monitoring is the process of actively scanning and assessing situational elements to gain information or understanding, or to maintain awareness to support team functioning. In traditional organisations, the manager monitors the performance of employees. In team-based organisations, the team monitors the performance of members within the team and the team as a whole is appraised by those it provides services and products for. Thus the Human Resource Management team may be appraised by all of the teams within the organisation for which it provides services (11, 14).

In team-based organisations, the emphasis is on integration between teams and on reducing the number of levels in the organisation so that there is less vertical difference between different teams and groups. In addition, the team-based organisation emphasises its uniqueness, adopts ways of working that are appropriate to the organisation in its current circumstances, environment and economic context, and adapts as the environment changes (11). Working in teams derive a sense of greater co-operation amongst all staff and clearer feedback from the organisation on staff performance, as a consequence of their team membership than those not working in clearly defined teams, and this accounts for the differences between team membership types in stress levels (9,11).

Several studies have shown the effects of inter professional teamwork on outcome criteria on the client, staff and organization level: On the client/patient level, high quality teamwork is linked with higher satisfaction and treatment acceptance, improved quality of treatment, improved patient safety and better clinical outcomes. On the staff level, higher job satisfaction, greater well-being, improved mental health; better team climate and increased team efficiency have been reported. On the organization level, high quality teamwork is associated with cost savings, higher workforce retention and reduced turnover (17).

2.2.4. Mutual Support

Mutual support is the ability to anticipate and support team members' needs through accurate knowledge about their responsibilities and workload. In studies about interactions or mutual support among nursing teams, cardiac surgery physician teams, and neonatal intensive care units, researchers have consistently found that when members engage in inclusive behaviour, the other team members feel more psychologically safe and are more likely to speak up about information relevant to the team's work (18, 19).

Establishing group norms for critical thinking rather than norms for forging consensus leads teams to engage in more effective information sharing (18). Once the work is under way, teams benefit from members, particularly high-status members, engaging in inclusive behaviours. Such behaviours include actively eliciting information from other team members—that is, asking questions explicitly and proactively about whether anyone has contradicting or as yet undiscussed information (18, 20). Inclusive behaviours also include showing appreciation for

members' contributions, for example, by stressing the importance of using all information (including mistakes) as a means for enhancing the team's work and learning and by reacting to others' contributions with constructive responses (18).

Good social relationships maintain effective teams. Personally, team members who are empathic and supportive of their colleagues offer practical assistance, share information and collaboratively solve problems. Social networks within and beyond teams also enhance individuals' access to strategic information; facilitate a better understanding of team tasks and an increased belief in the team's effectiveness. A major risk in healthcare teams arises from caring for patients who have significant physical and emotional needs (21).

Over 200 Cooperative Extension staff members in Washington State were asked independently of each other to define teamwork and about mutual support in a team. The results show that while a normative view of teamwork could be established, many individuals were in disagreement with this normative view. Most staff members felt that teamwork is the act of two or more persons working together toward a common goal, sharing their time, talents, and knowledge and using methods acceptable to all team participants. Others assigned an almost mystical quality to the term.

One staff member said teamwork is a quasi-formal attempt to do unto others as you would have them do unto you. Another said teamwork is doing our thing together to satisfy, improve, and enhance the growth of individuals and the society one commented that teamwork is a Rotary button. Some staff members identified teamwork with bureaucracy. One said that teamwork as exemplified by university administration seems to mean, Do as I say—don't make waves. Another said, Teamwork is work accomplished cooperatively by more than one individual under the direction or coordination of a leader (22).

In whole, roles are socially negotiated sets of mutual expectations and, by working closely with those in one's role set, role clarity results. Moreover, since team-working, by definition, involves interdependent working with close social contact and communication, it is likely that team members will experience more support from colleagues than those whose working relationships are less tightly linked.

2.2.5. Communication

Communication is a structured process by which information is clearly and accurately exchanged among team members. The value of having co-located teams for formal and informal communication encounters was emphasised in several studies (23, 24, 25), and a study on interdisciplinary practice in primary care across 10 countries and organized findings from health professionals about their needs for teamwork and team communication. Participants across many of the 10 countries reported that, in practice, they have experiences of poor communication and interpersonal conflicts as barriers to change (25, 26).

A survey study conducted in UK, from the Health Care Team Effectiveness Project, illustrate that in community mental health teams, effective communication between team members is associated with better mental health. In primary health care teams, the research shows that in those teams that have regular meetings there are higher levels of innovation in patient care, and teams which have at least one meeting a week have introduced a greater number of (and more substantial) innovations in patient care than those which have fewer meetings (24).

In keeping with the literature, there is a lot of evidence that the nature and regularity of communication between primary care professionals is a key factor in team working. Where communication is frequent and respectful and where there is clarity about roles and divisions of labour, teamwork is successful. Indeed, it appears that frequent, respectful communication can also be a lever to reducing role confusion, overlapping roles, and poor trust in each other's work. Such communication may be a function of structures for formal clinical meetings, dedicated events or initiatives to support teams or formal appraisal process (25, 27). Another study exposed that failures in communication account for up to 70-80% of serious medical errors in US (28).

A study conducted in Ethiopia on perceived nurse-physician communication showed that the mean perceived scores were 50.88±19.7% for perceived professional respect and satisfaction, and 48.52±19.7% for perceived openness and sharing of patient information on nurse-physician communication (29).

CHAPTER THREE: OBJECTIVES

3.1. General Objectives

➢ To assess perception of health workers towards teamwork and related factors in Jimma Zone public hospitals, south West Ethiopia, 2018 GC.

3.2. Specific Objective

➢ To determine the perception of health workers towards teamwork in Jimma zone public hospitals, South West Ethiopia.
➢ To identify factors affecting perception of health workers on teamwork in Jimma Zone public hospitals

CHAPTER FOUR: METHODS AND MATERIALS

4.1. Study Area and Period

The study was conducted in Jimma Zone Public Hospitals, Oromia Regional State, Ethiopia, from Augest13-sep 2/2018. The capital town of Jimma zone, Jimma, was located 345 km south west of AA. There were six public hospitals in the zone namely, Shenen Gibe Hospital, Agaro Hospital, Seka Hospital, Omo Nada Hospital, Limu Genet Hospital and Setema Hospital. These stated hospitals have different team structures with different number based on departments and similarities of professions; those are 150 one to five (1-5) networks or teams; seventy two departments and eighteen transformational leadership teams. A total of 546 health work forces are found in these hospitals with different profession and qualification. The study was conducted from August 13 to September 02/2018, in Jimma zone public hospital.

4.2. Study Design

A Facility based cross-sectional study was employed.

4.3. Population

4.3.1. Source population

The source population were all health workers found in the district hospitals.

4.3.2. Study population

Randomly selected health workers working in the hospitals during data collection period

4.3. Inclusion and Exclusion Criteria

4.3.1. Inclusion criteria

Health workers, who were served greater than six months at the time of data collection period

4.3.2. Exclusion criteria

Those health workers, who served for less than six months at the time of data collection period, were excluded.

4.4. Sample Size Determination

The sample size was determined by single population proportion formula:

Where;-

P- Proportion of health workers on negative perception of teamwork was taken as (p=50% will be used because there was no similar studies).

D- Margin of error- 5% of margin of error tolerated 95% CI- 5% level of significance

$$n = \frac{(Z\ a/2)^2\ P\ (1-P)}{D^2} = \frac{(1.96)^2\ 0.5\ (1-0.5)}{(0.05)^2} = 384$$

Since the number of all source population is less than 10,000 in all hospitals, population correction formula was used.

$$ni = \frac{nf}{1+\frac{nf}{N}}\ wherre, nf = final\ sample\ size = 384N = actual\ population\ size = 546ni$$

$$= 226$$

Finally by adding the possible non-response rate of 10% the total calculated sample size was 249. The sample size was distributed to the study hospitals, based on the proportion of the currently available health workers (Figure 2).

4.5. Sampling Techniques

From the beginning selection of the zone was purposive. Then, all hospitals (6 hospitals in jimma zone) with their number of health workers were listed and also all of the hospitals were selected for the study. After this sample size was distributed to each hospitals with proportional allocation of their number of health workers to obtain the final sample size 249.
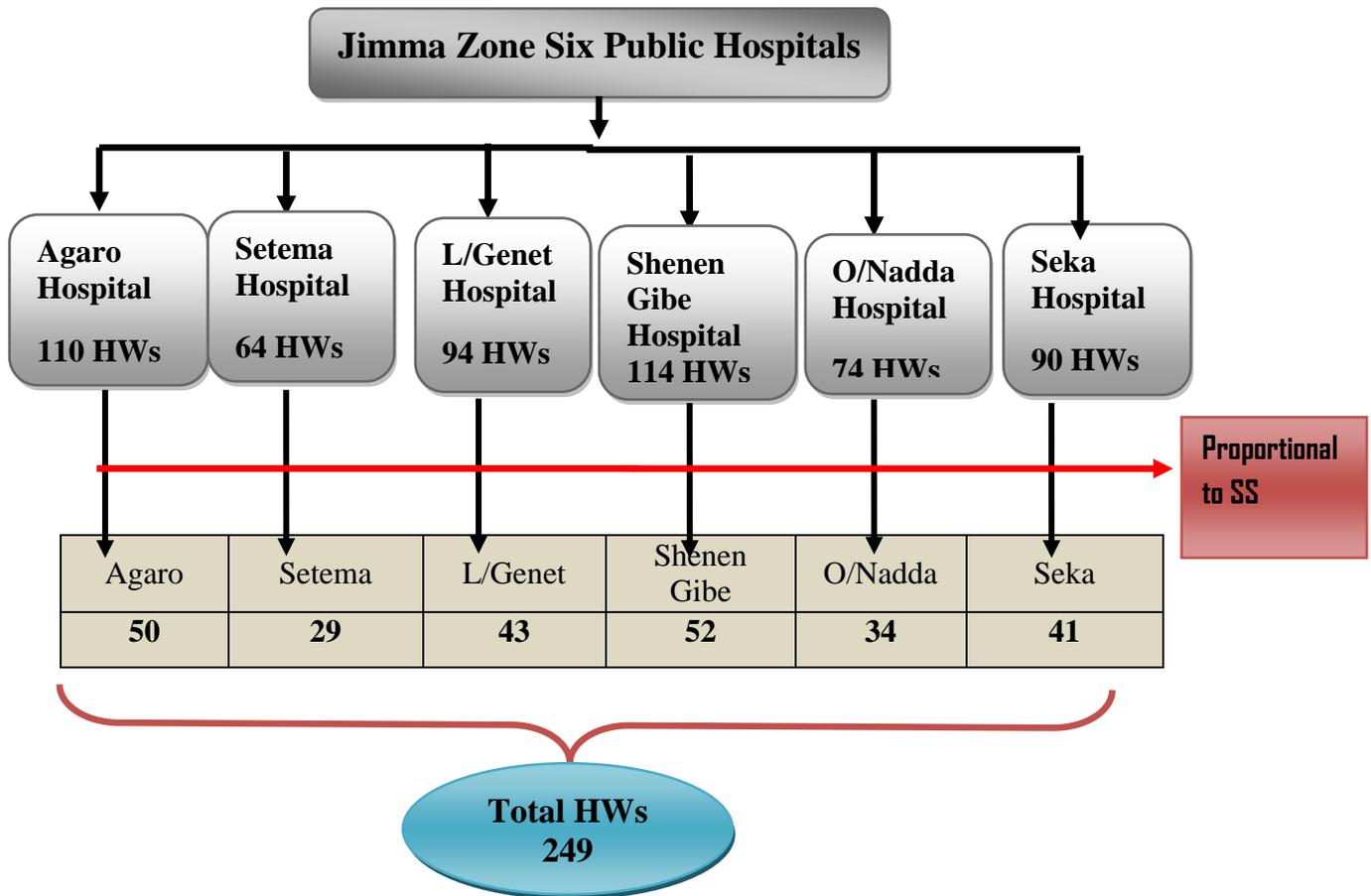
Figure 2: Sampling Procedures for perception of health workers towards teamwork in Jimma zone public hospital, 2018

4.6. Data Collection Method and Procedures

A semi-structured self-administered questionnaire was used to collect data. The questionnaire was prepared in English since the health workers can understand the tool. It consists of two sections: section one comprised the socio-demographic information consisting of seven items, while section two contained Likert scale question on Perception of health workers towards teamwork which is Adapted from: "*Team STEPPS® Teamwork Perceptions Questionnaire Manual by Battles, 2010"*. The "*Team STEPPS"* is a teamwork system designed for health workers/professionals, and it measures individuals' perceptions of group-level team skills and behaviour. It consisted of 35 questions related to teamwork measured on a five-point Likert scale (from 'strongly disagree' to 'strongly agree' (28).

4.8. Study Variables

4.8.1. Dependent Variable

- Perception health workers teamwork

4.8.2. Independent Variables

- Socio Demographic Factors (age, Sex, marital status, ,Education Level, types of profession, monthly income, work experience)

4.9. Operational Definitions

Teamwork: in this study means the overall mean value of perception towards five core components. It is classified as positive (mean> 3.59) and negative (mean<3.59) based on mean score (44).

Health Team: refers to the activity of working well together among health workers.

Health Workers: refers to all the people who work in the health sector, especially in hospitals.

Team Structure: in this study means the overall mean value of perception towards five core components. It is classified as positive (mean> 3.59) and negative (mean <3.59) based on mean score (44).

Leadership: in this study means the mean value of perception towards leadership support. It was classified as positive (mean> 3.59) and negative (mean<3.59) based on mean score.

Situation Monitoring: it means the mean value of perception towards situational monitoring. It's classified as positive (mean> 3.59) and negative (mean<3.59) based on mean score (44).

Mutual Support: in this study means the mean value of perception towards mutual support. It is classified as positive (mean> 3.59) and negative (mean<3.59) based on mean score (44).

Communication: in this study means the mean value of perception towards team communication. It is classified as positive (mean> 3.59) and negative (mean<3.59) based on mean score (44).

4.10. Data Analysis Procedure

Completed questionnaires were checked for completeness and consistency. Variable coding for each question was also performed by the principal investigator. To minimize data errors and

ensure data quality, double entry was made using Epi-Data version 3.1 statistical software. After it was checked, errors were corrected. Then cleaned data was exported to Statistical package for Social Science (SPSS) version 23 for statistical analysis.

Both descriptive and analytical statistical procedures were utilized. Data analysis was performed using variety of descriptive statistics such as frequencies, percentage, mean, median and standard deviations. Then, data were presented using tables. Sum scores were computed to generate a single teamwork index for the outcome variables and predicator variables. Mean value was taken to assess level of teamwork among health workers/professionals. Values less than mean score was taken as different as negative while values greater than mean score were taken as positive perception of team working.

Association between dependent and independent variables was analyzed first using Binary logistic regression analysis. Variables that had p<=0.25 on Binary logistic regression analysis was considered to be candidates for multivariable logistic regression analysis. Multivariable logistic regression was employed to analyze the relationship between the dependent variable and potential predictor variables (independent variables) to control effect of confounding variables. In the regression model, independent variables with a P-values <0.05 was considered as statistically significant.

4.11. Data Quality Management

Two days training was given to 12 data collectors and three supervisors where accepted to follow up for data quality. Standardized questionnaire was adopted from: *TeamSTEPPS® Teamwork Perceptions Questionnaire Manual by the American Institutes for research (2010).* This questionnaire was developed by the Agency for Healthcare Research and Quality (AHRQ). The researcher only added the socio demographic part of the questionnaire. The reliability of the questioner was determined by the developer of the "*Team STEPPS Teamwork Perceptions Questionnaire*" by calculating the Cronbach's alpha internal consistency test for each construct. Consequently, the questionnaire used in the current study had 35 items under five constructs called mutual support, team structure, situational monitoring, leadership, and communication (7 items measuring each of the constructs). The constructs and their associated scale reliabilities are between 0.88 to 0.95 with an overall reliability of .90 coefficient alpha which is highly reliable

as suggested by Cohen, Manion and Morrison (29). Pretest was also done in Jimma teaching Hospital on 5% of respondents.

4.12. Ethical Considerations

Before the actual work, ethical clearance and approval was obtained from the Institutional Review Board (IRB) of the College of Health Sciences, Jimma University. In addition permission was obtained from the respective hospitals. A letter of consent outlining the aim and giving further details about the study accompanied each questionnaire. To assure anonymity and confidentiality the names of the participants were replaced by codes. In addition, prior to administering the questionnaires, oral informed consent was obtained from the participants.

4.13. Dissemination Plan

The finding of this study was submitted to Jimma University College of Public Health, Department health economics management and policy. In addition it will be disseminated to the respective Hospitals, Zonal Health Office and Regional Health Bureau.

After approval, possible effort will be made for publication on scientific journals of Jimma University in appropriate journals.

CHAPTER FIVE: RESULTS

5.1. Socio-demographic Characteristics of study participants

In the study, a total of 249 health workers participated from Jimma zone public hospitals with response rate of 100%. Out of the total 249 participants of the study, the majority 178 (71%) of the health workers were male participants. Regarding to the age distribution of the respondents, majority 200 (80.3%) were fall in age group greater than 24 years, followed by 18-24 years which accounted for 49(19.7%)). Majority of respondents 150 (60.2%) were single, and 99(39.8%) were married.

Regarding to professional category nurses all type was accounts 113 (45.4%) of the total respondents, followed by medical doctors 40(16.1%), midwifes 34 (13.7%) and medical laboratories 25(10%). Others were classified in different categories such as pharmacy, radiographer, administration work force (Table 1).

Table 1 Socio-demographic characteristics of study participants of Jimma zone public hospitals, southwest Ethiopia, 2108.

variables		Total participants (n=249)	
		N	*%*
Sex	Male	178	71.5
	Female	71	28.5
Age	18-24	49	19.7
	>=24	200	80.3
Marital Status	Single	150	60.2
	Married	99	39.8
Work profession	Medical Doctor	40	16
	Nurse all type	113	45.4
	Midwife	34	13.7
	Medical Laboratory	25	10
	others	37	13.9
Level of Education	Masters and above	12	4.8
	Bachelor degree	193	13.7
	Diploma	43	3.6
Work Experience	6months -2Years	130	52.2
	>2 years	119	47.8
Monthly Salary	<=4500 ETB	136	54.6
	>4500 ETB	113	45.4

5.2. Participants' Perception Difference by Socio-demographic Factors

When respondents asked their overall perception towards team working, the majority of males 91 (36.5%) perceived teamwork negatively than 44(17.7%) females who perceived it positively. Older age groups ≥24 years 61% viewed teamwork negatively than the younger age groups. As to marital status, the majority 96 (64%) of single or unmarried participants view teamwork negatively as compared to the married 52 (52.5%) who perceived teamwork negatively.

With regards to work profession, more midwifes 21 (61.8%) perceived teamwork positively as compared to medical doctors who perceive teamwork negatively as revealed by 32 (80%) of them. On the other hand, participants with masters and above 5(41.7%) perceive teamwork positively than as compared to bachelor degree holder 78(40.1%) and diploma 26(60.5%). As to the work experiences and monthly income of the respondents less difference observed among the groups since larger number of people in these groups view teamwork positively (Table 2).

Table 2: Health workers Perception of jimma zone difference by Socio-demographic Factors (n = 249).

Variable		Perception (N=249)					
		Positive Perception		Negative Perception		Total	
		N	%	N	%	n	%
Sex	Male	87	34.9	91	36.5	178	71.5
	Female	44	17.7	27	10.8	71	28.5
Age	18-24	23	46.9	26	53.1	49	19.7
	>=24	78	39	122	61	200	80.3
Marital Status	Single	54	36	96	64	150	60.2
	Married	47	47.5	52	52.5	99	39.8
Work profession	Medical Doctor	8	20	32	80	40	16
	Nurse all type	45	39.8	68	60.2	113	45.4
	Midwife	21	61.8	13	37.2	34	13.7
	Medical Laboratory	11	44	14	56	25	10
	others	16	43.2	28	56.8	37	13.9
Educational level	Masters and above	5	41.7	7	58.3	12	5.2
	Bachelor degree	78	40.1	115	59.9	193	77.5
	diploma	17	39.5	26	60.5	43	17.3
Work Experience	<=2Years	48	36.9	82	63.1	130	52.2
	>2 years	53	44.5	66	54.5	119	47.8
Monthly Salary	<=4500 Et birr	55	40.4	91	59.6	136	54.6
	>4500 Et birr	46	17.3	67	15.3	113	45.4

5.3. Perception of Health workers toward Teamwork in Jimma zone public hospitals

Table 3 showed that majority of health workers were agree on team structure they perceived, among 249 respondents 131(52.6%) of them said that staff overlap sufficiently so that work can be shared when necessary, 136(54.6%) staff are held accountable for their actions, 68(27%) of the respondents agreed that staff within my unit share information that enables timely decision making by the direct patient care team. Regarding efficient use of resources 125(50.2%) respondents were agreed and 120(48.2%) of the respondents were agreed that Staffs should understand their roles and responsibilities. Majority of the respondents, 133(53.4%) of them were agreed on unit has clearly articulated goals. Finally 129 (51.9%) health workers were agreed that unit operates at a high level of efficiency (see table 3). The mean ratings for perception of health workers on team structure for each items were ranged from the lowest for, Staffs understand their roles and responsibilities, 3.510   (SD=1.143), to the highest for, My unit makes efficient use of resources, 3.895 (SD=1.026). These mean ratings were perceptions of health workers on team structure 2 of 7 items slightly lower than the overall mean=3.755

Table 3: Perception of health workers on team structure in Jimma zone public hospitals, southwest Ethiopia, 2108

Team Structure	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std
The skills of staff overlap sufficiently so that work can be shared when necessary.	11(4.4%)	21(8.4%)	31(12.4%)	131(52.6%)	55(22.1%)	3.594	1.016
Staffs are held accountable for their actions.	14(5.6%)	19(7.6%)	27(10.8%)	136(54.6%)	53(21.3%)	3.795	1.021
Staff within my unit share information that enables timely decision making by the direct patient care team.	10(4%)	21(8.4%)	22(8.8%)	128(51.4%)	68(27%)	3.783	1.043
My unit makes efficient use of resources (e.g., staff supplies, equipment, and information).	22(8.8%)	28(11.2%)	37(14.9%)	125(50.2%)	37(14.9%)	**3.895**	1.026
Staffs understand their roles and responsibilities.	12(4.8%)	25(10%)	17(6.8%)	120(48.2%)	75(30.1%)	**3.510**	1.143
My unit has clearly articulated goals.	9(3.6%)	13(5.2%)	43(17.3%)	133(53.4%)	51(20.5%)	3.887	1.094
My unit operates at a high level of efficiency.	9(3.6%)	35(14.1%)	40(16.1%)	129(51.9%)	36(14.5%)	3.819	.939
Overall Mean							**3.755**

Table 3 indicates majority of the respondents 121(48.6%) of them agreed that my supervisor/manager considers staff input when making decisions about patient care.. Concerning manager provides opportunities to discuss the unit's performance after an event, 109(43.9%) of the respondents were respond agree and 15(6%) responded strongly disagreed. In case of manager takes time to meet with staff to develop a plan for patient care 100(40.2%) of the respondents were respond agree and minority of the respondents, 28(11.2%) of them responded strongly disagreed. Regarding to conflicts 95(38.2%) of the respondents agreed that manager resolves conflicts successfully and 104(41.8%) of the respondents were agreed on manager models appropriate team behavior. More than two fifth 106(42.6%) of the respondents were agreed on manager ensures that staffs are aware of any situations or changes that may affect patient care (See table 4). The mean ratings for perception of health workers on leadership for each items were ranged from the lowest for, My supervisor/manager takes time to meet with staff to develop a plan for patient care, 3.188 (SD=1.198), to the highest for, My supervisor/manager considers staff input when making decisions about patient care, 3.421(SD=1.137). These mean ratings were perceptions of health workers on leadership 4 of 7 items slightly lower than the overall mean=3.28

Table 4: Perception of health workers on leadership in Jimma zone public hospitals, southwest Ethiopia, 2108

Leadership	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std
My supervisor/manager considers staff input when making decisions about patient care.	18(7.2%)	44(17.7%)	34(13.7%)	121(48.6%)	32(12.9%)	**3.421**	1.137
My supervisor/manager provides opportunities to discuss the unit's performance after an event.	15(6%)	56(22.5%)	47(18.9%)	109(43.9%)	22(8.8%)	3.269	1.090
My supervisor/manager takes time to meet with staff to develop a plan for patient care.	28(11.2%)	49(19.7%)	46(18.5%)	100(40.2%)	26(10.4%)	**3.188**	1.198
My supervisor/manager ensures that adequate resources (e.g., staff, supplies, equipment, and information) are available.	25(10%)	53(21.3%)	42(16.9%)	101(40.6%)	28(11.2%)	3.216	1.195
My supervisor/manager resolves conflicts successfully.	20(8%)	51(20.5%)	55(22.1%)	95(38.2%)	28(11.2%)	3.241	1.142
My supervisor/manager models appropriate team behavior.	27(10.8%)	44(17.7%)	49(19.7%)	104(41.8%)	25(10%)	3.224	1.176

My supervisor/manager ensures that staffs are aware of any situations or changes that may affect patient care.	25(10%)	36(14.5%)	54(21.7%)	106(42.6%)	28(11.2%)	3.305	1.154
Overall Mean						**3.28**	

Concerning situation monitoring table 5, 121(48.6%) of the respondents were agreed on staffs effectively anticipate each other's needs. As can be seen from the table below staff monitors each other's performance 140(56.2%) of the respondents were agreed and 6(2.4%) of the respondents were strongly disagreed. On the other hand staffs exchange relevant information as it becomes available140 (56.2%) of the respondents were agreed. Majority of the respondents 121(48.6%) were agreed that staffs continuously scan the environment for important information. Regarding to staffs share information regarding potential complications, 135(54.2%) of the respondents were responded agree and 9(3.6%) of the respondents were responded strongly disagree. In case of staff meets to reevaluate patient care goals when aspects of the situation have changed, 137(55%) of the respondents were respond agree and minority of the respondents 9(3.6%) were strongly disagreed. Concerning mistakes 123(49.4%) of the respondents were agreed on staffs correct each other's mistakes to ensure that procedures are followed properly (See table 5). The mean ratings for perception of health workers on situation monitoring for each items were ranged from the lowest for, Staffs continuously scan the environment for important information, 3.457 (SD=0.995) to the highest for, Staffs correct each other's mistakes to ensure that procedures are followed properly, 3.457 (SD=.995). These mean ratings were perceptions of health workers on situation monitoring 3 of 7 items slightly lower than the overall mean=3.58.

Table 5: Perception of health workers on situation monitoring in Jimma zone public hospitals, southwest Ethiopia, 2108

Situation Monitoring	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std
Staffs effectively anticipate each other's needs.	12(4.8%)	35(14.1%)	54(21.7%)	121(48.6%)	27(10.8%)	3.465	1.019
Staff monitors each other's performance.	6(2.4%)	29(11.6%)	57(22.9%)	128(51.4%)	29(11.6%)	3.582	.925
Staffs exchange relevant information as it becomes available.	6(2.4%)	31(12.4%)	43(17.3%)	140(56.2%)	29(11.6%)	3.622	.9300
Staffs continuously scan the environment for important information.	10(4%)	37(14.9%)	56(22.5%)	121(48.6%)	25(10%)	**3.457**	.995
Staffs share information regarding potential complications (e.g., patient changes, bed availability).	9(3.6%)	25(10%)	43(17.3%)	135(54.2%)	37(14.9%)	3.666	.9699
Staff meets to reevaluate patient care goals when aspects of the situation have changed.	9(3.6%)	32(12.9%)	44(17.7%)	137(55%)	27(10.8%)	3.566	.9696
Staffs correct each other's mistakes to ensure that procedures are followed properly.	6(2.4%)	32(12.9%)	43(17.3%)	123(49.4%)	45(18.1%)	**3.678**	.992
Overall Mean							**3.58**

From table 6, majority of the respondents 127(50.4%) of them agreed that Staff assists fellow staff during high workload. Concerning Staff request assistance from fellow staff when they feel overwhelmed, 112(48.2%) of the respondents were respond agree and 37(14.9%) responded strongly disagreed. In case of staff cautions each other about potentially dangerous situations 98(38.2%) of the respondents were respond agree and minority of the respondents, 8(3.2%) of them responded strongly disagreed. Regarding to feedback 114(41.8%) of the respondents agreed that feedback between staff is delivered in a way that promotes positive interactions and future change and 124(48.2%) of the respondents were agreed on staff advocate for patients even when their opinion conflicts with that of a senior member of the unit. More than two fourth 127(54.2%) of the respondents were agreed on when staffs have a concern about patient safety, they challenge others until they are sure the concern has been heard (See table 6). The mean ratings for perception of health workers on mutual support for each items were ranged from the lowest for, Staff resolves their conflicts, even when the conflicts have become personal, 3.469

(SD=1.03) to the highest for, Staff assists fellow staff during high workload, 3.792 (SD=1.041). These mean ratings were perceptions of health workers on mutual support 3 of 7 items slightly lower than the overall mean=3.65.

Table 6: Perception of health workers on mutual support in Jimma zone public hospitals, southwest Ethiopia, 2108

Mutual Support	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std
Staff assists fellow staff during high workload.	10(4%)	26(10.4%)	28(11.2%)	127(50.4%)	63(27%)	**3.792**	1.041
Staff request assistance from fellow staff when they feel overwhelmed.	4(1.6%)	35(14.1%)	31(12.4%)	112(48.2%)	37(14.9%)	3.714	.960
Staff cautions each other about potentially dangerous situations.	8(3.2%)	22(8.8%)	37(14.9%)	98(38.2%)	28(11.2%)	3.791	.981
Feedback between staff is delivered in a way that promotes positive interactions and future change.	12(4.8%)	29(11.6%)	49(19.7%)	114(41.8%)	25(10%)	3.586	1.044
Staff advocate for patients even when their opinion conflicts with that of a senior member of the unit.	8(3.2%)	29(11.6%)	53(21.3%)	124(48.2%)	25(10%)	3.534	.911
When staffs have a concern about patient safety, they challenge others until they are sure the concern has been heard.	6(2.4%)	23(9.2%)	49(19.7%)	127(54.2%)	37(14.9%)	3.678	.903
Staff resolves their conflicts, even when the conflicts have become personal.	12(4.8%)	35(14.1%)	58(23.3%)	140(52.2%)	42(16.9%)	**3.469**	1.03
Overall Mean							**3.65**

Concerning communication, 122(49.0%) of the respondents were agreed on Information regarding patient care is explained to patients and their families in lay terms. As can be seen from the table below staffs relay relevant information in a timely manner, 136(54.6%) of the respondents were agreed and 6(2.4%) of the respondents were strongly disagreed. On the other hand communicating with patients, staff allow enough time for questions 131(52.6%) of the respondents were agreed. Majority of the respondents 136(54.6%) were agreed that Staff uses common terminology when communicating with each other. Regarding to staff verbally verifies information that they receive from one another, 136(54.6%) of the respondents were responded

agree and 5(2.0%) of the respondents were responded strongly disagree. In case of Staff follows a standardized method of sharing information when handing off patients, 130(52.2%) of the respondents were respond agree and minority of the respondents 8(3.2%) were strongly disagreed. Concerning staff seeks information from all available sources, 135(54.2%) of the respondents were agreed (See table 7). The mean ratings for perception of health workers on communication for each items were ranged from the lowest for, When communicating with patients, staff allow enough time for questions, 3.581(SD=1.048) to the highest for, Staff verbally verifies information that they receive from one another, 3.775 (SD=.8457). These mean ratings were perceptions of health workers communication 2 of 7 items slightly lower than the overall mean=3.678.

Table 7: Perception of health workers on communication in Jimma zone public hospitals, southwest Ethiopia, 2108

Communication	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std
Information regarding patient care is explained to patients and their families in lay terms.	6(2.4%)	33(13.3%)	43(17.3%)	122(49.0%)	45(18.1%)	3.670	.997
Staffs relay relevant information in a timely manner.	6(2.4%)	31(12.4%)	41(16.5%)	136(54.6%)	35(14.1%)	3.654	.951
When communicating with patients, staff allow enough time for questions.	12(4.8%)	34(13.7%)	36(14.5%)	131(52.6%)	36(14.5%)	**3.581**	1.048
Staff uses common terminology when communicating with each other.	5(2.0%)	32(12.9%)	38(15.3%)	136(54.6%)	38(15.3%)	3.682	.950
Staff verbally verifies information that they receive from one another.	6(2.4%)	15(6%)	42(16.9%)	152(61%)	34(13.7%)	**3.775**	.8457
Staff follows a standardized method of sharing information when handing off patients.	8(3.2%)	25(10%)	44(17.7%)	130(52.2%)	42(16.9%)	3.694	.9730
Staff seeks information from all available sources.	11(4.4%)	21(8.4%)	42(16.9%)	135(54.2%)	40(16.1%)	3.690	.9861
Overall Mean							**3.678**

5.4. Health workers Overall Perception toward Teamwork by Core Components

In the overall analysis of the study, 47.4% of the health workers respondents perceived teamwork negatively. Although 52.6% perceived it positively.
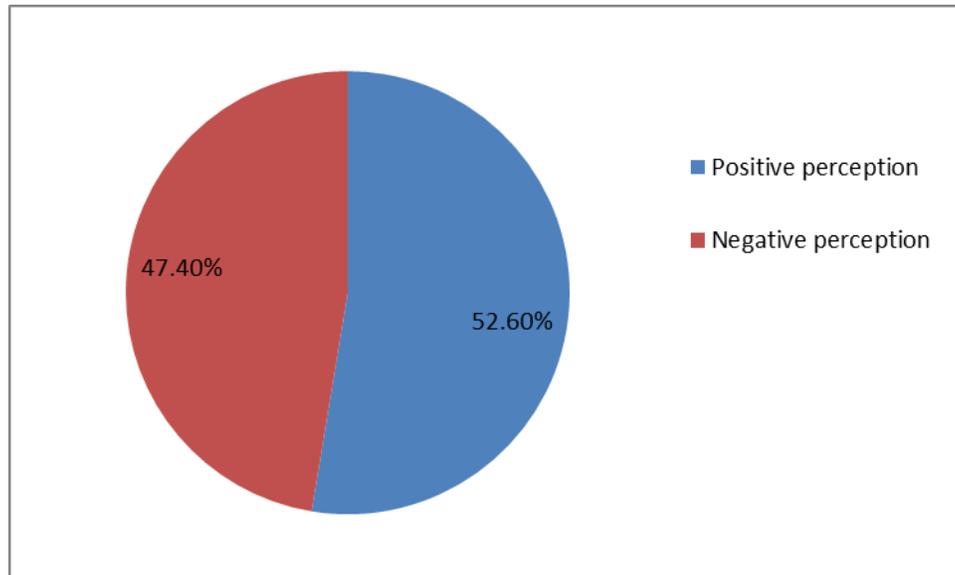
Figure 3: Overall perception

As to the result of the analysis in Table 8, the Health worker' perception found to be inconsistent among the construct variables. Accordingly, the mean of construct variable leadership and situational monitoring below the overall mean score 3.588, this indicates health workers overall perception toward teamwork on construct variable leadership and situational monitoring perceived below overall mean. On the other hand, team structure, mutual support and communication constructs perceived positively by the participants of the study where the mean of each of this construct is above overall mean 3.588 (Table 8).

Table 8: Health Workers overall perception toward teamwork by Core Components in Jimma Zone Public Hospitals, South West Ethiopia 2018

Construct	N	Minimum	Maximum	Mean	Std. Deviation
Team structure	249	1.00	5.00	3.75	0.78
Leadership	249	1.00	5.00	3.28	0.94
Situational monitoring	249	1.00	5.00	3.58	0.72
Mutual Support	249	1.00	5.00	3.65	0.68
Communication	249	1.00	5.00	3.678	0.71
Overall Perception	**249**	**1.60**	**5.00**	**3.588**	**0.60**

5.5. Association between socio-demographic factors on Health worker' Perception towards Teamwork

Bivariate logistic regression was employed and variables with p-value <0.25 were selected as candidate variables for multivariable logistic regression. Consequently, from variables under socio demographic characteristics, it was found out that sex, types of profession, work experience, and marital status were selected as a candidate for multivariable logistic regression with overall teamwork perception of the Health worker in Jimma zone public hospitals. From the core teamwork variables, Profession and work experience were significantly associated with overall teamwork perception on multivariable logistic regression with the p value of <0.05. But sex, age, marital status and monthly income were not significantly associated with overall teamwork perception of the Health worker in Jimma zone public hospitals. From this multivariable logistic regression analysis, Type of profession were statistically associated with perception of team work [AOR=0.216 and 95% CI= (0.076, 0.610)]. This implies that professionally midwifery health workers were 0.216 times less likely to had negative perception than those who had medical doctors. Work experience were statistically associated with perception of team work [AOR=1.357and 95% CI= (1.067, 1.888)]. This implies that health workers who had greater than 12 years' work experience were 1.357times more likely to had negative perception than those who had work experience less than 2 years (See table 9).

Table 9: Association between socio-demographic factors on perception toward Teamwork among health workers in Jimma zone public hospitals

Variable	Categories	Perception		COR(95%CI)	AOR(95%CI)
		Negative perception	Positive perception		
Sex	Male	87	91		
	Female	44	27	.587(.334, 1.029)	.631(.331, 1.201)
Age	18-24	29	20		
	25-31	93	94	1.466(.775,2.773)	
	32-38	7	4	0.829(.214,3.209)	
	>38	2	0	.011(0.024,1.892)	
Marital Status	Single	73	78		
	Married	56	42	.694(.415, 1.161)	.807(.441, 1.477)
Professional	Medical Doctor	12	28		
	Nurse all type	60	53	.379(.175, 818)	.491(.215,1.119)
	Midwife	24	10	.179(.066, .486)	.216(.076, .610)*
	Medical Laboratory	13	12	.396(.140, 1.115)	.417(.143, 1.216)
	Environmental Health	0	1	61.22(0.00, 89.321)	20.306(0.000)
	Health Officer	1	2	.857(.071,10.379)	.620(.040, 9.602)
	Pharmacy	9	5	.238(.066, .861)	.272(.073,1.009)
	Radiographer	2	1	.214(.018, 2.595)	.205(.017,2.503)
	Admin and others	10	6	.257(.076, .869)	.358(.101, 1.264)
Work experience	<2Years	63	67		
	3-5	30	28	.878(.472, 1.630)	.899(.454, 1.780)
	6-8	25	11	.414(.188, 0.910)	.511(.211, 1.239)
	9-11	5	10	1.881(.609, 5.806)	2.461(.694, 8.732)
	>12	8	2	.235(.048, 1.150)	1.357(1.067, 1.888)*
Monthly income	<4446	73	63		
	4725-6799	43	38	1.024(.590, 1.777)	
	7111-10024	15	17	1.236(.566, 2.699)	

*indicates significance at 95% CI

CHAPTER SIX: DISCUSSION

From this multiple logistic regression analysis, type of profession were statistically associated with perception of team work [AOR=0.216 and 95% CI= (0.076, 0.610)]. This implies that professionally midwifery health workers were 0.216 times less likely to had negative perception than those who had medical doctors. This finding was in line with study done in (21), the study revealed that mutual support were 81% more likely associate with perception of team work. Perceived teamwork positively than who had not (AOR 0.19, 95% CI, 0.06-.64). Good social relationships maintain effective teams. Personally, team members who are empathic and supportive of their colleagues offer practical assistance, share information and collaboratively solve problems. Social networks within and beyond teams also enhance individuals' access to strategic information; facilitate a better understanding of team tasks and an increased belief in the team's effectiveness. A major risk in healthcare teams arises from caring for patients who have significant physical and emotional needs.

This study revealed that, Work experience were statistically associated with perception of team work [AOR=1.357and 95% CI= (1.067, 1.888)]. This implies that health workers who had greater than 12 years' work experience were 1.357times less likely to had negative perception than those who had work experience less than 2 years. This finding was in line with a study conducted in Nigeria, showed that team structure /size, recognition, managing the team, ability to perform, accountability, temperament, managing stress, creating the environment, defined common purpose, measureable goals goals/objectives, effective leadership, good cohesion/ commitment to team, mutual respect and effective communication is an important factor that make a team effective as revealed by 81.9% of the Delta State respondents (14). This might be due to similarity in level of the organization in which thy work.

In this study the majority of males 91 (36.5%) perceived teamwork negatively than 44(17.7%) females who perceived it positively. Older age groups ≥24 years 61% viewed teamwork negatively than the younger age groups. As to marital status, the majority 96 (64%) of single or unmarried participants view teamwork negatively as compared to the married 52 (52.5%) who perceived teamwork negatively. With regards to work profession, more midwifes 21 (61.8%) perceived teamwork positively as compared to medical doctors who perceive teamwork negatively as revealed by 32 (80%) of them. This result was supported by Suzanne *et al*,.(1) the

result showed that participants were predominately female ($n = 431$, 89%), less than 39 years of age ($n = 298$, 61%), employed full time ($n = 336$, 67%) with representation from a broad range of nurse/midwife designations varying from an assistant in nursing to nurse practitioner.

Work experience were statistically associated with perception of team work [AOR=1.357and 95% CI= (1.067, 1.888)]. This implies that health workers who had greater than 12 years' work experience were 1.357times more likely to had negative perception than those who had work experience less than 2 years. This finding was in line with a study conducted in acute care tertiary hospital, Australia showed that experienced staff had significantly higher teamwork scores compared to new graduates ($p < 0.02$, df1, f 5.7). The Shared Mental Model (SMM) subscale rated highest across all groups of specialties and nurse designation and new graduate nurses ranging from 3.8 to 4.2. No statistically significant differences between team works mean scores among specialty units or among nursing designation were found.

This finding showed that, health worker's leadership were statistically associated with perception of teamwork This indicated that health workers who had negative leadership were almost 18 times more likely to had negative perception than those who had positive leadership. This finding was almost similar with study done on the Health Care Team Effectiveness Project in UK ,in which it showed that lack of clear leadership is associated with poor teamwork(9). Also, the most important organizational factor supporting team based health care is institutional leadership that fully and unmistakably hugs and supports these principles in word and action (14).

The study finding showed that, health worker's communication were statistically associated with perception of teamwork This indicated that health workers who had negative communication were 7 times more likely to had negative perception than those who had positive communication. This finding was similar with the study conducted on Perception of Interdisciplinary Communication among Correctional Health Care Providers found no tactical significance in pre-test and post test scores in terms of leadership and mutual support, and significance in terms of team stricture, situation monitoring, and commination (4).

Strength and Limitation of the Study

Strengths of the Study

➢ Standardized Questionnaire was adapted from Battles (2010) to collect data on the perception of Health worker towards team working, and the tool enable the study to achieve its objectives through the "Team STEPPS® Teamwork Perceptions Questionnaire."

➢ All the public hospitals of Jimma zone and health workers with different professions were included.

Limitation of the Study

➢ This study was conducted only on Health workers working in Jimma zone public hospitals. Hence, the results cannot be generalized to Health worker who work in other health facilities (Health centres and Health posts).

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

7.1. Conclusion

In this study, divergent views were identified among the health workers towards teamwork. It was confirmed that a significant number of the respondents perceived teamwork unfavorably. There was negative perception on team structure and mutual support components of teamwork. Also, there was negative perception towards team leadership, situation monitoring and communication components of teamwork by the health workers. The study further revealed that mutual support, team structure, situational monitoring, leadership, and communication were significantly affected teamwork. Hence, the implication is that where there was poor practice on the core teamwork components, higher percentage of the health workers have negative perception towards teamwork than there was good practice on the core components of teamwork. This in turn implies that collaborative practice can improve health service delivery but different perception of teamwork negatively affected the interest of health workers to implement it.

7.2. Recommendations

Based on the findings and conclusions made, the following recommendations were forwarded:

Federal Ministry of Health of Ethiopia and Oromia Regional Health Bureau

➢ Ethiopia Federal Ministry of Health (FMOH) and Oromia Regional Health Bureau (ORHB) should reinforce policy and strategies that enable hospitals to better practice teamwork approach in health service delivery.

➢ ORHB and Jimma Zone Health Office in collaboration with partners and universities like Jimma University should arrange and provide trainings on team structure, leadership, situation monitoring, mutual support and communication to health workers from each profession so as to strengthen the health teams' capacity.

Jimma Zone Health Office and Hospital Leaders

➢ Jimma Zonal Health Office and Hospital leaders should work collaboratively and conduct procedural follow up on the implementation of the team approach in the service delivery at the same time by strengthening health workers towards teamwork.

➢ Team leaders and team members (i.e. the Health workers) should improve their practice of teamwork in order to enhance interdisciplinary support for effective, patient-centered health service delivery and to restrict accidents as well as risks arise from personal decisions.

For other researchers

➢ Further studies needed to be conducted on the effectiveness of teamwork in health facilities, and the effects of teamwork on health service delivery quality.

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Annexes

Annex 1: Questionnaire

Jimma University

College of Public Health and Medical Science

Department of Health Economics, Management and Policy

Information sheet

Dear Sir/Madam

My Name is _____**.** I am in the process of completing my Master's degree in Public Health, in Human Resource for Health Management (MPH/MSC) at the University of Jimma. I have to conduct research for my thesis, on the perception of health workers on teamworkin Jimma Zone Public Hospitals.

The attached document contains questions related to core components of teamworkin order to determine your individual perception of teamworkon those aspects. There is no right or wrong answers. No risks are associated with the study and the results would help to design strategies for effective team works in Hospitals and come up with recommendations to revise policy for team working. For confidentiality, names will not be written down and as soon as the questionnaires are completed the data collector will gather them. You are free to refuse or withdraw your consent and no punishment measures will be exercised.

Are you willing to participate in this study?

Yes ☐   No ☐   (if no, don't continue to fill the questionnaire)

Name of data Collector_____   Signature_____

Name of Supervisor_____   Signature_____

Date of Data Collection _____   Questionnaire Id. _____

Place of Your Work

1. Agaro Hospital ☐
2. Setema Hospital ☐
3. L/Genet Hospital ☐
4. Shenen Gibe Hospital ☐
5. O/Nadda Hospital ☐
6. Seka Hospital ☐

Section I: Background Information

Your Team Code/Name _____ Your Department _____

Thick in the box or Enter your answers to the questions below using [√].

Q1	Back Ground Information	Remark

Q100	**Sex**
	   1. Male ☐
	   2. Female ☐	

Q101	**Age (in completed years)** _____	

Q102	**Marital status?**
	   1. Single ☐
	   2. Married/ cohabited ☐
	   3. Divorced/Separated ☐
	   4. Widows ☐	

Q103	**What is Your Profession?**
	   1. Medical Doctor ☐
	   2. Nurse all type ☐
	   3. Midwife ☐
	   4. Medical Laboratory ☐
	   5. Environmental health ☐
	   6. Health Officer ☐
	   7. Pharmacy ☐
	   8. Radiographer ☐
	   9. Other (including admin. Specify)_____	

Q104	**What is your Level of education?**
	   1. Specialist ☐
	   2. General Practitioner ☐
	   3. Master's Degree ☐
	   4. Bachelor Degree ☐
	   5. Advanced Diploma ☐
	   6. Diploma ☐
	   7. Certificate ☐
	   8. Other (Specify)_____	

Q107	Your Work experience _____	
Q108	Your Average Monthly Income (in ETB birr) _____	

Q109	**How do you perceive Teamworkin your hospital?**
	   1. Positively ☐
	   2. Negatively ☐	

Section II: Teamwork Perceptions Questionnaire

Instructions: Please complete the following questionnaire by placing a check mark [√] in the box that corresponds to your level of agreement from Strongly Agree to Strongly Disagree to show your perception on team working. Please answer every question, and select only one response for each question. The questionnaire is anonymous, so please do not put your name or any other identifying information on the questionnaire.

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Q2	**Team Structure**					
Q201	The skills of staff overlap sufficiently so that work can be shared when necessary.					
Q202	Staff are held accountable for their actions.					
Q203	Staff within my unit share information that enables timely decisionmaking by the direct patient care team.					
Q204	My unit makes efficient use of resources (e.g., staff supplies, equipment, information).					
Q205	Staff understand their roles and responsibilities.					
Q206	My unit has clearly articulated goals.					
Q207	My unit operates at a high level of efficiency.					
Q3	**Leadership**					
Q301	My supervisor/manager considers staff input when making decisions about patient care.					
Q302	My supervisor/manager provides opportunities to discuss the unit's performance after an event.					
Q303	My supervisor/manager takes time to meet with staff to develop a plan for patient care.					
Q304	My supervisor/manager ensures that adequate resources (e.g., staff, supplies, equipment, information) are available.					
Q305	My supervisor/manager resolves conflicts successfully.					
Q306	My supervisor/manager models appropriate team behavior.					
Q307	My supervisor/manager ensures that staff are aware of any situations or changes that may affect patient care.					

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Q4	**Situation Monitoring**					
Q401	Staff effectively anticipate each other's needs.					
Q402	Staff monitors each other's performance.					
Q403	Staff exchange relevant information as it becomes available.					
Q404	Staff continuously scan the environment for important information.					
Q405	Staff share information regarding potential complications (e.g., patient changes, bed availability).					
Q406	Staff meets to reevaluate patient care goals when aspects of the situation have changed.					
Q407	Staff correct each other's mistakes to ensure that procedures are followed properly.					
Q5	**Mutual Support**					
Q501	Staff assists fellow staff during high workload.					
Q502	Staff request assistance from fellow staff when they feel overwhelmed.					
Q503	Staff caution each other about potentially dangerous situations.					
Q504	Feedback between staff is delivered in a way that promotes positive interactions and future change.					
Q505	Staff advocate for patients even when their opinion conflicts with that of a senior member of the unit.					
Q506	When staff have a concern about patient safety, they challenge others until they are sure the concern has been heard.					
Q507	Staff resolve their conflicts, even when the conflicts have become personal.					

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Q6	**Communication**					
Q601	Information regarding patient care is explained to patients and their families in lay terms.					
Q602	Staff relay relevant information in a timely manner.					
Q603	When communicating with patients, staff allow enough time for questions.					
Q604	Staff use common terminology when communicating with each other.					
Q605	Staff verbally verify information that they receive from one another.					
Q606	Staff follow a standardized method of sharing information when handing off patients.					
Q607	Staff seek information from all available sources.					

Note: *Adapted from TeamSTEPPS® Teamwork Perceptions Questionnaire Manual by the American Institutes for research (2010).*

Thank You for Your Participation!!!

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

Name: _____

Signature: _____

Name of the institution: _____

Date of submission: _____

This thesis has been submitted for final examination with my approval as University advisor

Name and Signature of internal Examiner

_____

_____

Name and Signature of the first advisor

_____

_____

Name and Signature of the second advisor

_____