

# Psychosocial Risks Among Female Military Personnel in Burkina Faso

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**Received:** 06 November 2017; **Accepted:** 07 December 2017; **Published:** 04 January 2018

## Abstract

The presence of female personnel in the army of Burkina Faso is a recent phenomenon. The first military women have joined the army from 2007 onwards. This integration into this previously male environment exposes women to specific psychological difficulties. The objective of this survey was to study the psychosocial risks (PSR) incurred by female military personnel of the army in Burkina Faso, and to identify the factors associated with these risks. It was a descriptive cross-sectional and once-through analytical study that ran from March 8, 2016 to May 9, 2016. During the study period, 195 female military members from all departments and services of the National armed forces, mostly young, were investigated. The main factors associated with psychosocial risks were seniority in the profession, rank, service constraints, lack of independence, and interpersonal relationships. PSR (Psycho-Social Risks) have deleterious effects on the psychological health, motivation and job performance of female staff. At the end of our study, it seems necessary to set up a program to fight against the PSR incurred by this female staff in the National Army of Burkina Faso.

**Keywords:** Psychosocial Risks; Occupational Risks; Stress; Female Military Personnel; Burkina Faso

## 1. Introduction

Psychosocial risks (PSR) correspond to occupational situations that expose the worker to trouble of adaptation between the individual and his or her work environment [1, 2, 3]. This imbalance induces somatic or psychic manifestations, determined by causal factors, deleterious at both the personal and the group level [3, 4].

Psychosocial risks refer to many situations such as stress, moral harassment, physical violence, sexual assault and harassment, psychic suffering, depression and suicide, and musculoskeletal disorders encountered in the workplace [5]. These psycho-social risks will negatively impact on the mental and physical health of individuals, and also on their professional performance. However, exposure to psychosocial risks varies greatly from one sector of activity to another [1-6].

Throughout the world, the profession of arms has long been reserved for men. With changing attitudes, women have gradually integrated this profession. Women have physiological and physical specificities towards men, which are responsible for men's prejudices and could be responsible for psychosocial risks [7]. Existing data on SPR for female personnel in the armed forces come mainly from developed countries, and show that psychosocial risks are increasingly encountered among female military personnel [7-15]. In 2013, according to the Pentagon, the number of sexual assaults in the US military had increased by 60% compared to 2012 [8]. In the Australian army, 62% of female soldiers said they were victims of harassment, while for 24% of them, their male colleagues had already tried to "caress and kiss them" [11]. The same observation was noted in the Swedish, British, Israeli and French army where sexual assaults constituted the psychosocial risk incurred by female military personnel with respectively 35.9%, 67%, 25% and 45% [12-15]. The prevalence of work impairment in French garrisons was 37% for women compared to 27% for men [14].

In Africa, to date, there are no published data on PSR in the armed forces. Empirical observations in the professional lives of several women in military units in Burkina Faso suggest that the PSR would exist there. The present study, which is the first in Burkina Faso, aims at identifying the existence and factors associated with PSR among female staff serving in the various military units of Burkina Faso.

## **2. Methodology**

We carried out in the different garrisons of Burkina Faso, a descriptive and analytical single-pass study from March 8th, 2016 to May 9th, 2016. Were included in our study the female military personnel who were present in their unit during the period of study with at least six months of service and who agreed to participate in the study in a free and informed manner. Systematic probabilistic sampling was done from the female staff register. To be representative of the female staff population for a 5% confidence level, the sample size was estimated at 226. The data were collected using two questionnaires: a socio-demographic questionnaire and a questionnaire inspired from KARASEK's request-control-work support for the exploration of psychosocial risks [1, 2, 16]. This questionnaire assesses in the workplace the quantitative constraints (workload, work pace, cognitive requirements), organization and leadership (predictability, recognition, fairness, clarity of roles, role conflicts). The data collected, were coded, and entered progressively on a microcomputer equipped with the software EPI INFO version 3.5.1 where they were treated and analyzed. The threshold of significance was set at 5%. The research was conducted in accordance with the protocol, and good clinical practice in research. Anonymity and confidentiality were assured to all respondents. The study had a prior authorization from the military hierarchy.

### 3. Results

#### 3.1 Overall results

The solicited female military personnel were 226. They all spontaneously agreed to participate in the study. After collecting the questionnaires, thirty one sheets were not usable because they were insufficiently informed and were discarded. The analysis ultimately focused on 195 people.

#### 3.2 Sociodemographic characteristics of the respondents

The average age of the respondents was 25, 8 +/- 4, 0 years with extremes of 20 and 52 years. The distribution of the respondents according to the other sociodemographic characteristics is made in Table 1 below.

Variables	Total number (n = 195)	Percentage (%)
<b>1 – Department of the army</b>		
Air Force	11	5.64
BNSP *	17	8.72
GCA **	77	39.48
Gendarmerie	52	26.67
Land forces	38	19.49
<b>2-Level of Studies</b>		
Primary	5	2.6
Secondary	164	84.1
Superior	26	13.3
<b>3-Matrimonial situation</b>		
Married	20	10.3
Single	175	89.7
<b>4-Socioprofessional category</b>		
Military from the ranks	94	48.5
2nd class	49	25.1
1st class	23	11.8
Corporal	22	11.3
<b>Sub-officers</b>	100	51
Sergeant / Marshal	63	32.3
Chief Sergeant / Marshal Chief	35	18
Adjutant	1	0.5
Chief Warrant Officer Major	1	0.5
<b>Officers</b>	1	0.5
Sub-Lieutenant	1	0.5
<b>5-Professional Seniority</b>		
[1 to 6 years]	78	40
[6 years and more]	117	60
<b>6-years of age</b>		
[20-25]	86	44.1
[25-30]	79	40.5
[30-35]	26	13.3
[35 and more]	4	2.1

\*National Brigade of Firefighters; \*\*Central Grouping of the Armies

**Table 1:** Sociodemographic characteristics of the respondents.

### 3.3 Clinical aspects

The use of the questionnaire allowed identifying the psychosocial risks of female military personnel. Quantitative constraints were the most frequent risk, noted in 89.20% of respondents. Table 2 gives the prevalence of psychosocial risks noted among the respondents. The scores found in the scores of the different headings explored by the questionnaire (Table 3) show a predominance of the "average score" in all the headings.

Type of Psychosocial Risk	Total number	Percentage (%)
Quantitative constraints	173	89.2
Absence of organization of service time	149	76.9
Insufficiency of recognition and equity	16	8.7
Insufficiency in the predictability of activities	61	31.3
Role Conflicts	50	25.7
Absence of autonomy in the execution of tasks	136	70.2
Lack of fulfillment	163	84.1
Regret of the choice of military life	46	23.6
Feeling constantly very stressed	115	59.4
Professional Burn-out	120	62
Moral harassment	68	34.9
Physical aggression	24	12.7
Verbal aggression	74	38.1
Sexual harassment	15	7.9
Family / Work Conflict	119	61.5
Little trust to colleagues	85	43.6
Dissatisfaction with the relationship with the upper rank	121	62.5

**Table 2:** Distribution of respondents according to the psychosocial risks found.

Working Conditions	Low Score n (%)	Average Score n (%)	Strong Score n (%)	Very High Score n (%)
<b>Quantitative constraints</b>				
Workload	98 (50.2)	59 (30.3)	29 (14.9)	9 (4.6)
Pace of work	50 (25.6)	86 (44.1)	41 (21.1)	18 (9.2)
Cognitive requirements	24 (12.3)	144 (73.8)	23 (11.8)	4 (2.1)
<b>Organization and leadership</b>				
Predictability	61 (31.3)	80 (41)	45 (23.1)	9 (4.6)
Recognition	17 (8.7)	130 (66.7)	37 (19)	11 (5.6)
Equity	36 (18.5)	116 (59.5)	35 (17.9)	8 (4.1)
Clarity of Roles	33 (16.9)	138 (70.8)	21 (10.8)	3 (1.5)
Role conflict	71 (36.4)	74 (37.9)	36 (18.5)	14 (7.2)
Leadership Quality of Supervisor	1 (0.5)	150 (76.9)	42 (21.5)	2 (1.1)
Social support from supervisor	8 (4.1)	115 (59)	52 (26.6)	20 (10.3)
<b>Autonomy</b>				
Margin for maneuver	53 (27.1)	84 (43.1)	43 (22.1)	15 (7.7)
Possibility of fulfillment	41 (21)	123 (63.1)	26 (13.3)	5 (2.6)
<b>Health and wellbeing</b>				
Self-assessed health	52 (26.6)	133 (68.2)	6 (3.1)	4 (2.1)
Stress	25 (12.8)	54 (27.8)	58 (29.7)	58 (29.7)
Exhaustion	24 (12.4)	50 (25.6)	80 (41)	41 (21)

Emotional Requirement	75 (38.5)	84 (43.1)	28 (14.3)	8 (4.1)
Family / Work Conflict	84 (43.1)	56 (28.7)	22 (11.3)	33 (16.9)
Occupational Insecurity	114 (58.5)	58 (29.7)	21 (10.8)	2 (1)
<b>Professional experience</b>				
Meaning of work	8 (4.1)	171 (87.7)	15 (7.7)	1 (0.5)
Envolvement in the company	39 (20)	131 (67.2)	21 (10.8)	4 (2)
Job Satisfaction	35 (17.9)	135 (69.3)	25 (12.8)	-
<b>Horizontal relations</b>				
Trust between colleagues	30 (15.4)	110 (56.4)	39 (20)	16 (8.2)
Social support from colleagues	10 (5.3)	103 (52.8)	70 (35.7)	12 (6.2)
<b>Vertical relationship</b>				
Trust in Superiors	14 (7.2)	128 (65.6)	39 (20)	17 (7.2)
Social support from superiors	8 (4.1)	115 (59)	52 (26.5)	20 (10.4)
<b>Relations with civilians</b>				
Trust with civilians	8 (4.1)	115 (59)	52 (26.6)	20 (10.3)
Social support from civilians	53 (27.3)	92 (47.2)	48 (24.5)	2 (1)
Emotional requirement from civilians	100 (51.2)	28 (14.4)	28 (14.4)	39 (20)

**Table 3:** Distribution of respondents by working conditions and by level of score.

## 4. Discussion

### 4.1 Limits and merits

The main limitations of our study are the transversal nature of the study, the hetero-administered nature of the questionnaires and the relative large number of records excluded from the study. Despite these limitations, our study which is, to our knowledge, the first study, has the merit of having assessed the psychosocial risks of women in military settings, with internationally recognized valid measurement tools, on a representative sample of the female population of the armies of Burkina Faso.

### 4.2 Sociodemographic characteristics

Our survey showed a preponderance of young subjects (84.6%) in the target population with an average age of 25, 8 years. In France, youth was also noted in the military female staff with an average age of 31, 9 years [10], which is relatively higher than in our study. The fact that the female military population in Burkina Faso is recruited between 20 and 27 years according to the professional category, and especially the fact that the integration of female staff in the Burkinabe army is in its first decade, could explain this difference in age with the French army.

### 4.3 Clinical aspects

In our study 89.2% of military women complained of quantitative constraints. The evaluation of the French military condition also showed the existence of quantitative constraints within this army [9]. The presence of the constraints in our study could be explained by the fact that the profession of weapons is of constraining nature. In fact, the different services of the armies are constantly adapting their programs according to the operational imperatives related to security and defense of the territory. In addition, services of duty, guard, week guard, confinement to barracks that are recorded with disciplinary rigor are factors of exposure to psychosocial risks. Comparison between quantitative constraints and "health and well-being" showed no statistically significant link. This could be justified by the fact that "health and well-being" is a multifactorial concept and therefore is not solely due to quantitative constraints.

Our study shows that the margin of autonomy of female staff was limited, with more than half of the respondents considering that she had no autonomy in the execution of tasks. Indeed, one of the specificities of functioning in a military environment is the execution of the orders of the hierarchy without hesitation or murmuring. In the armed forces, discipline and order are required; regulations reduce freedom in the performance of tasks, even freedom of expression [7-9].

The majority of female staff (92.7%) had an average score regarding their health and well-being, which could translate the fact that the malaise is very real in the army. In the area of organization and leadership, 76.9% of female staff had an overall average score. 84.1% said they did not feel fulfilled in military life while 23.6% regretted the choice of military career. This result could be explained by the fact that there is rigidity within the army with sometimes what could be assimilated to a refusal to change. In this respect, it is noted that the actual service time is in majority greater than the normal scheduled time (guard, permanence) with a need to have an immediate operational availability, to be always ready to serve the homeland [7-9, 14, 17, 18]. Our study shows a lack of recognition and fairness in tasks (8.7%), a lack of predictability (31.3%), and strong scores in role conflicts (25.7%). The comparison between organization/leadership and vertical relationship showed the existence of a statistically significant link: the weaker the relationship with the superior, the weaker the organization and leadership [3, 10, 16-18]. The relationship with the superior could therefore be influenced by the organization and leadership within the armed forces.

The majority of female staff had an average score in the field of professional experience; which means that the majority had the sense of average work. The low professional experience could therefore be a source of demotivation in the service. This could explain why quantitative constraints expose female staff to psychosocial risks. In other words, professional experience negatively influences the field of "Health and Well-being". The comparison between stress and "health and well-being" showed that there was a statistically significant link. According to the European Foundation for the Improvement of Living and Working Conditions, the majority of employees suffered from stress [6]. Burn-out at the service or burn-out of female staff had a high score of 62%. This means that a large proportion of female staff face exhaustion in the practice of the profession. The comparison between burn-out and "well-being health" showed that there was a statistically significant link. In fact, the lack of balance between the situation to be managed and the adaptability of the body of the individual, the constraints that exceed the rewards, expose female military personnel to burn-out [7, 16].

Our study showed that 38.5% of female staff had a low score for emotional demands. This situation could be explained not only by the constraints within the army, but also by the singularity of the "military woman" in an army long reserved for men. More than 34.9% of the female staff in our study admitted to having been harassed morally within the National Armed Forces. According to the European Foundation for the Improvement of Living and Working Conditions, 5% of employees had been subjected to moral harassment [3]. This rate is low compared to ours, and could be explained by the fact that this study was conducted in the general population.

For sexual harassment, 7.9% of female staff admitted having been victims in the practice of their profession. This could be explained by the fact that the military woman is often seen as a "source of provocation or seduction" by some colleagues. In addition, the female morphology provokes psychological or physiological reactions in some colleagues, which may lead them to temptation and acting out. In the European magazine "EUROGIP", 3% of women have suffered sexual harassment in European companies [3]. The fact that in these armies, women have been integrated for several years could explain our differences. In addition to this, the European survey was conducted in business.

In the family/work conflict situation, 61.5% of the female staff had an average score. This indicates that female staff has difficulty reconciling family life and work. The work of the female staff takes up enough time and/or energy and is detrimental to family life [7, 8, 11]. Indeed, the hours of service within armies are long with sometimes unforeseen events and constraints related to the security situation of the country.

The majority of female staff had average scores in the horizontal relationship area. This is the relationship we have with our colleagues in the service. This reflects shortcomings in the quality of the relationship between them and male colleagues. These results could be explained by the fact that, within the ranks, there is a relationship of subordination linked to seniority in the rank and some are confronted with cases of indiscipline resulting in the refusal to perform orders.

More than 62.5% of female staff had a low score in the area of vertical relationship. This indicates that this relationship remains weak. This could be explained by the fact that orders within the armed forces always come from the superior, their execution does not take into account the physical or emotional state of the subordinate. He or she must perform them without murmuring or hesitation.

## **5. Conclusion**

The psychosocial risk assessment shows that these risks are a reality in the national armed forces of Burkina Faso. Several factors favor these psychosocial risks at the level of the Burkinabé female military personnel. Although the presence of women is recent in our military, future studies should focus on researching the consequences of these psychosocial risks and preventing them.

## **6. Acknowledgments**

Female staff of the FAN (National Armed Forces) of Burkina Faso, General Staff of Burkina Faso Armed Forces.

## **7. Conflict of Interest:** None

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