Purser support and the tendency of depression among civil female flight attendants in Indonesia

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Abstrak

Latar belakang: *Depression can occur in female flight attendants. The purpose of this study was to find the Latar belakang: Depresi dapat terjadi di antara pramugari dalam melakukan pekerjaannya. Tujuan penelitian ini membuktikan pengaruh dukungan purser dan faktor lainnya terhadap kecenderungan depresi pada pramugari penerbangan sipil di Indonesia.*

Metode: *Studi potong lintang dengan sampling purposif terhadap pramugari yang sedang melakukan pemeriksaan pengujian kesehatan rutin di Balai Kesehatan Penerbangan, pada tanggal 12-18 Mei 2014 Jakarta. Kriteria eklusi dalam penelitian ini adalah pramugari yangtidakminum obat antidepresan atau golongan benzodiazepine, tidak mempunyai kebiasaanminum minuman alkohol lebih dari 3 unit per hari. Kecenderungan depresi dinilai dengan kuesioner Beck Depression Inventory. Sedangkan dukungan purser, rekan kerja, di luar pekerjaan dan beban kerja mental dinilai dengan kuesioner NIOSH Generic Job Stress. Faktor-faktor risiko kecenderungan depresi dianalisis dengan regresi linear.*

Hasil: *Di antara 242 pramugari yang sedang melakukan pemeriksaan pengujian kesehatan rutin memenuhi kriteria inklusi adalah 145 orang. Dukungan purser, dukungan di luar pekerjaan, dan beban kerja mental merupakan faktor dominan yang mempengaruhi kecenderungan depresi. Dengan peningkatan 1 poin dukungan purser akan menurunkan 0,552 poin depresi [koefisien regresi = (β) = -0,552; p= 0,033]. Dengan peningkatan 1 point dukungan di luar pekerjaan akan menurunkan 1,191 poin depresi (β = -1,191; p= 0,000). Namun sebaliknya, dengan peningkatan 1 poin beban kerja mental akan meningkatkan 0,549 poin depresi (β = 0,549; p= 0,045).*

Kesimpulan: *Semakin tinggi dukungan purser dan dukungan di luar pekerjaan akan semakin mengurangi kecenderungan depresi, sebaliknya semakin tinggi beban kerja mental akan semakin mempertinggi kecenderungan depresi. (**Health Science Journal of Indonesia 2015;6:76-80**)*

Kata kunci: *depresi, dukungan purser, beban kerja mental, pramugari*

Abstract

Background: Depression can occur in female flight attendants. The purpose of this study was to findthe correlation between purser support and other factors with depression among female civil flight attendants in Indonesia.

Methods: This cross-sectional study with purposive sampling was carried out on female civilian flight attendantsundergoing routine medical check up at the Civil Aviation Medical Center Jakarta from May 12to18, 2014. Those taking antidepressants or benzodiazepines,ordrink alcohol more than 3 times a day, were excluded for this study. Depression was measured using the Beck Depression Inventory Questionnaire. Purser support, co-workers support, support outside workand mental workload were measured using the NIOSH Generic Job Stress Questionnaire. Risk factors for depression were analyzed using linear regression.

Results: Out of 242 female flight attendants undergoing routine medical check up, 145 persons met the study criteria. Purser support, support outside work, as well as mental workload were the dominant risk factors related to depression among female civilian flight attendants. One point increase of purser support, decreaseddepression by 0.552 point [regression coefficient (β) = -0.552; p = 0.033]. One point increase of support outside work, decreaseddepression by 1.191 points [β = -1.191; p = 0.000]. On the other hand, one point increase of mental workload, increaseddepression by 0.549 point (β = 0.549; p = 0.045).

Conclusion: Increased purser and outside of worksupportsdecreased the risk of depression, however, more mental work load increased depression among civilian flight attendants in Indonesia. (***Health Science Journal of Indonesia 2015;6:76-80***)

Keywords: depression, purser support, mental workload, female flight attendants.

A person with depression will show loss of energy and interest, guilt, hard to focus, changing the way they do their activity, loss of cognitive ability, speech, and vegetative functions, more over, they think about suicide.[1] Depression can occured among female flight attendants. This is a serious issue because it would affect their performance and presence at work.

Flight attendants are responsible for passenger safety, making sure all passengers are comfortable and safe, serving the need of passengers, and also as a bridge of communication between cabin and cockpit.[3,4] All these tasks must be reported to the purser as a supervisor. A purser is the head of senior and junior cabin crews who controls and reports all of the activities and events that occured during flight to captain pilot as a flight leader.[5]

The Department of Environmental Health of the United States compared health conditions of female flight attendant to the general population. This study showed that the tendency of depression in female flight attendants was 3.8% higher than the general population.[4] The National Institute for Occupational Safety and Health (NIOSH) of the United States showed that support from purser and outside of work, and also mental workload have a significant correlation with the tendency of depression.[6]

The aim of this study was to identify the correlation between purser support and other factors and the tendency of depression among female flight attendants in Indonesia.

METHODS

This was a cross sectional study with purposive sampling in female flight attendants undergoing routine medical examinations at the Civil Aviation Medical Center, Jakarta, from May 12-18, 2014.

The inclusion criteria were active working female flight attendants, aged 18-50 years old, and agreed to participated this study. The exclusion criteria were those working as purser or cabin 1, taking antidepressants or benzodiazepine, or drink alcohol more than three times in a day.

The subjects who agreed to participate in this study were asked to sign an informed form after given an explanation about this study.

The data collected included several demographic characteristics, habits (physical activity and smoking, and job (working hours in a day and mental workload). The tendency of depression was measured using the Beck Depression Inventory Questionnaire, which had good validity and reliability (Cronbach's alpha 0.88).[7,8] This questionnaire consisted of 21 questions about depression symptoms which occured during the last two weeks such as sadness, self-blame, suicidal tendencies, crying, sensitive, feeling not physically attractive, sleep disturbances, feeling tired, weight loss, somatic preoccupation and loss of libido.

The subjects were asked to answer each statement on the questionnaire by giving a mark in the box that perfectly fit with their condition during the last 2 weeks. Each box represents score from 0-3, which means 0 for the lowest answer and score 3 for the highest answer. The score for each statement was added to achieve total score. The minimum was 0 and the maximum was 63. Higher scores mean the subject had a higher tendency for depression. Psychosocial factors (purser support, support outside of work, and coworker support) were measured using the NIOSH generic job stress questionnaire.[9,10] The questions were (1) How much do each of these people go their way to do things to make your work life easier for you?; (2) How much can each of these be relied on when things get tough at work?; (3) How easy is it to talk with each following people?; and (4) How much of the following are willing to listen to your personal problem? The subjects were asked to choose an answer that perfectly fit their condition during the last 1 month, by selecting an answer 1 = do not have any such person, 2 = not at all, 3 = a little, 4 = somewhat, 5 = very much. Psychosocial support was scored by adding each answer from each statement to achieve a minimum score 4 and a maximum score 20. A lower score means the subject has higher support.

This study was analyzed by linear regression and the calculation with Stata software released 9.

Ethical approval was obtained from the Health Research Ethical Committee of the Faculty of Medicine, Universitas Indonesia. This study was conducted with permission from the Chief of the Civil Aviation Medical Center, Jakarta.

RESULTS

Out of 242 female flight attendants doing routine medical check up, 159 persons agreed to participate the study, however, 14 respondents were excluded

from this study. The 14 excluded consisted of 8 purser/cabin 1, 2 persons drank alcohol more than three times in a day, 1 person consumed benzodiazepin, and 3 persons did not completely fill the questionnaire. Leaving 145 persons meeting the study criteria.

Table 1 shows that the youngest subject was 18 years old and the oldest subject was 44 years old. The average age was 24 years old, the average working hours in a week was 8 hours, and the average job tenure was less than 5 years.

Variables with homogenous distribution based on variance coefficients <20% were age, purser support, support outside of work, and co-workers support, whereas variables with heterogenous distribution were depression, job tenure, working hours, and mental workload.

Table 2 shows age, job tenure, purser support, support outside of work, and co-workers support were more likely to decrease the tendency of depression. Whereas, job tenure and mental work load were more likely to increase the tendency of depression.

Table 3 shows the model selected. Purser support, support outside of work, as well as mental work load were dominant risk factors related to depression among female civilian flight attendants. One point of increased purser support will decrease depression by 0.552 point [regression coefficient (β) = -0.552; p = 0.033]. One point of increased support outside of work will decrease depression by 1.191 points [β = -1.191; p = 0.000]. On the other hand, one point of increased mental workload increased depression by 0.549 point (β = 0.549; p = 0.045).

Table 1. Several demographic characteristics, job and psychosocial factors (n=145)

	Minimum	Maximum	Mean	SD	CV (%)
Depression (units)	0	34	7.88	7.987	101.30
Age (years)	18	44	24.10	4.706	19.52
Working hours	3	18	8.59	2.602	30.29
Job tenure (units)	1	25	4.67	3.832	82.05
Mental workload	5	17	8.61	2.367	27.49
Purser support (units)	8	20	14.41	2.810	19.50
Co-worker support (units)	8	20	15.37	2.461	16.01
Support outside work (units)	9	20	16.54	2.821	17.05
Physical activity	0	3	1.06	0.872	82.26

Remarks: SD = standard of deviation; CV = coefficient of variation

Table 2 Several demographic factors, job, habits, and psychosocial factors tendency of depression (n=145)

	Crude regression coefficient	95% confidence interval	P
Age	-0.164	-0.443;0.114	0.247
Constant	11.837		
Job tenure	-0.217	-0.559;0.125	0.213
Constant	8.889		
Purser support	-0.625	-1.084;-0.1676	0,008
Constant	16.893		
Education	-0.209	-1.778;1.360	0.793
Constant	8.162		
Support outside work	-1.227	-1.649;0.806	0.000
Constant	28.192		
Flight time	-0.193	-2.812;-2.425	0.884
constant	8.186		
Co-worker support	-0.698	-1.221;-0.173	0.009
Constant	18.600		
Physical activity	0.164	-1.349;1.677	0.830
Constant	7.702		
Smoking status	0.725	-1.158;2.608	0.448
Constant	7.630		
Working hours	0.401	-0.101;0.904	0.117
Constant	4.428		
Mental workload	1.081	0.552;1.609	0.000
Constant	-1.439		

Table 3. Dominant factors related to tendency of depression
(n=145)

	Adjusted regression coefficients	95% confidence interval	P
Purser support	-0.552	-1.059;0.045	0,033
Outside work support	-1.191	-1.723;0.659	0.000
Co-worker support	0.542	-0.135;1.086	0.116
Mental workload	0.549	0.012;1.091	0.045
Constant	22.478	10.853;34.103	0.000

DISCUSSION

The limitation that should be noted in this study was that the subjects were purposively selected among female flight attendants in Indonesia who were taking routine medical examinations at the Civil Aviation Medical Center, Jakarta.

In this study, purser support had a significant correlation with the tendency of depression. It decreased the tendency of depression among female flight attendants in Indonesia. Female flight attendants with higher purser support had a lower tendency of depression. This was supported by findings of the MacDonald *et al* study.[6] The study consisted of 73 female flight attendants employed by two commercial airlines in the United States of America. The results showed that purser support was negatively correlated with the tendency of depression, with $p \leq 0.01$.[6]

Another research in Amsterdam revealed that purser support had a good impact for female flight attendants with emotional problems in their work.[2] The higher the social support they received, the less stress factors they would experience.[2] Therefore, the tendency of depression would decrease.

Ruguilies *et al* analyzed the impact of psychosocial work characteristics on the tendency of depression among 4133 (49% women) of the workforce in Denmark between 1995 and 2000.[11] They found that female workers who had low supervisor support had a higher chance to experience depression [relative risk (RR) = 2.03; 95% confidence interval (CI) = 1.20-3.43].[11]

The present study also revealed that there was a significant correlation between support outside of work and the tendency of depression. The higher the support from outside of work, the less depression the experienced. This was supported by The National Institute for Occupational Safety and Health (NIOSH) in the United States which showed that support outside of work was negatively correlated with the tendency of depression, with $p \leq 0.01$.[6]

Furthermore, the present study showed that there was a significant correlation between mental work load and the tendency of depression. The higher mental work load they received, the higher the depression experienced. A previous study also had similar result showing mental work load was positively correlated with the tendency of depression.[6]

In this study, job tenure and depression was not significantly related. This may be due to adaptation by the female flight attendants to their work environment. Job tenure increased working exprience, knowledge, and working skills of the female flight attendants making them more skilled at overcoming difficulties. This was also supported with the results of another study which stated that the higher the job tenure, the lower the tendency of depression experienced.[12] A prior study also found that job stressors will decrease when they have worked for a longer period of time. The greater the working experience, knowledge, and responsibilities the better the adaption to the job stressors.[13]

In conclusion, increased purser and outside of work supports decreased the risk of depression, however, more mental work load increased depression among civilian flight attendants in Indonesia.

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