

Effect of Workload and Breastfeeding Motivation of Working Mothers

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Abstract

Background : The practice of exclusive breastfeeding in Indonesia still falls short of expectations due to working mothers' struggle with managing both working outside and household chores. This workload results in mothers experiencing physical and emotional exhaustion and impacts on their motivation to practice exclusive breastfeeding, hence exclusive breastfeeding failure.

Objective: To shed light on the relationship between workload and exclusive breastfeeding motivation of working mothers in the working area of the Public Health Center of Bergas District, Semarang Regency.

Method: This is a cross-sectional study with a sample of working mothers in the working area of the Public Health Center of Bergas District, Semarang Regency, with babies aged 0–6 months. The sample of 32 respondents was recruited by purposive sampling technique. The data collected were analyzed by Spearman's rho analysis. The instruments employed in this research were the modified versions of questionnaires from existing literature.

Results : The workload of nearly all of the sample (31 respondents, 96.8%) was categorized into Level 2. Besides, the vast majority of the breastfeeding, working mothers in Bergas District (30 people, 93.7%) had strong exclusive breastfeeding motivation. Last but hardly the least, a p -value of 0.801 (> 0.05) was obtained, suggesting no relationship between workload and exclusive breastfeeding motivation.

Conclusion : Workload bore no association with the exclusive breastfeeding motivation of working mothers. Despite the high workload, if the reinforcement system was high, individual motivation would generally remain high.

Keywords: *workload, exclusive breastfeeding motivation, working mothers*

Introduction

Exclusive breastmilk is human milk given to infants from birth until six months of age without the accompaniment of food or drink. Exclusive breastfeeding is followed by supplementation until the baby reaches two years of age ¹. In Indonesia, the exclusive breastfeeding practice fails to live up to expectations. Exclusive breastfeeding practice failure

is still prevalent, and the rate is higher in mothers working at institutional offices, government- or private-run, than in those working from home. In the case of those engaged in office work, time and rule inflexibility often sets a barrier to spending time together with their babies and takes a toll on their breastfeeding intensity ². The government through Regulation of the Minister of Health of the Republic of Indonesia of 2014 set the exclusive breastfeeding scope target at 80%, but in parts of its territory, the percentage barely could touch as high as 50% ³.

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Exclusive breastfeeding support, especially for working mothers, is manifested through global and national policies. One of such policies is Government Regulation No. 33 of 2012 on Exclusive Breastfeeding.

Another is set out in Article 2 of Joint Ministerial Regulation of the Minister of Women’s Empowerment, the Minister of Manpower and Transmigration, and the Minister of Health No. 48/MEN-PP/XII/2008/PER27/MEN/XII/2008 on Breastfeeding Promotion at Workplace ³. Meanwhile, global support came from UNICEF through a statement in 2013 that exclusive breastfeeding for a minimum of six months makes the lowest-cost life-saver for children ⁴.

In addition to the demand from their full-time work, mothers are also faced with household chores, including nursing their babies, after work. This phenomenon is referred to as second shift ⁵. The implications include mothers’ inability to complete their household tasks maximally due to physical and emotional fatigue. It is assumed then that this second-sift-driven physical and emotional exhaustion will influence mothers’ exclusive breastfeeding motivation ¹

In light of the abovementioned, this research intended to observe whether relation does exist between workload and exclusive breastfeeding motivation of working mothers. The aim of this research was to identify mothers’ workload and motivation to engage in breastfeeding practice.

Materials and method

This research is a quantitative study with a cross-sectional design, in which the relationship of independent to dependent variables was measured at one time with no follow-up ⁵.

Population and sample

The sample enrolled comprised working mothers

in the working area of the Public Health Center of Bergas District, Semarang Regency. The inclusion criteria used were that respondents worked outside, had baby 0–6 months old, resided in the working area of the Public Health Center of Bergas District, and were breastfeeding. Meanwhile, the exclusion criteria were that respondents were suffering from mental disorder, were unemployed or worked at home (operating online business or operating local shop or booth at home), and resided beyond the working area of the Public Health Center of Bergas District, Semarang Regency. A sample of 32 respondents was derived from a population of 47 working mothers. This number had surpassed the minimum number of subjects for correlational studies of 30 ⁶. The sampling technique employed was purposive sampling technique.

Research variables

The independent variable in the present study was workload, whereas the dependent was working mothers’ exclusive breastfeeding motivation.

Research instruments

The instruments employed in this study were questionnaires modified from existing literature. For the variable workload, the instrument adopted was the Fatigue Likelihood Scoring questionnaire by Transport Canada, consisting of five questions regarding total working hours per week, maximum working duration per shift, minimum interval between two shifts, maximum night shift duration per week, and off-day frequency. The scores generated would point to the final position in the five-level fatigue scale below.

Table 1 Fatigue Likelihood Scoring Blueprint

	Scores	0	1	2	4	8
1	Total working hours per week	≤ 36 h	36.1–43.9	44–47.9	48–54.9	55+
2	Maximum shift duration per day	≤ 8 h	8.1–9.9	10–11.9	12–13.9	14+
3	Minimum rest time before setting out for work the next day	≥ 16 h	15.9–13	12.9–10	9.9–8	≤ 8

Cont... Table 1 Fatigue Likelihood Scoring Blueprint

4	Maximum night shift duration (from 7 pm) per week (including household chores)	0 h	0.1–8	8.1–16	16.1–24	24+
5	Off-day frequency	≥1 in 7 days	≤ 1 in 7 days	≤ 1 in 14 days	≤ 1 in 21 days	≤ 1 in 28 days

As for the variable exclusive breastfeeding motivation, the measurement was conducted by the Breastfeeding Motivation Instructional Measurement Scale (BMIMS) questionnaire, previously subjected to expert-based content validity test and then selected in this research based on the measurement parameters. The lowest score obtained was 12, and the highest 48. The scores obtained were then converted into percentages (%), according to which, as stated by Suadana *et.,al* (2018) that motivation was categorized, with scores between 67–100% being strong, 34–66% medium, and 0–33% weak.

It was identified from this research that nearly all respondents scored 9 to 18 for the Fatigue Likelihood Scoring (FLS). Based on the response analysis, the workload fell into such a range owing to the fact that a great majority of the respondents worked a total of 55 hours every week (in the scoring system belonging to the score 8). In other words, they spent 10 to 11 hours a day (score 2) 5–6 days a week working, with only 8–9 hours a day for rest (score 4). Besides, they were given off-day 1–2 times weekly (score 1). When everything was added up, the final score fell to the 9–18 range. Based on the Fatigue Likelihood Scoring guide, the score range denoted Level 3 fatigue, which belonged to the yellow area of the instrument ⁷.

Validity test

Validity testing was run by consumer validity, that is, by distributing questionnaire to 15 respondents who were enrolled by accidental sampling technique. The respondents were chosen for sharing similarities in characteristics with the sample. The correlation coefficient from the validity testing was compared to the coefficient in the Pearson's product moment correlation table with 5% margin of error (0.05).

If the counted value was beyond the value in the table, the question items would be considered valid and fit to be used in the research. But if the contrary was true, the question items would not be considered valid and thus would not be used in the research ⁸.

Reliability test

The reliability test run against the questionnaire used Cronbach's alpha formula. The counted *r alpha* was compared to the table *r alpha*. If the counted *r alpha* was greater than the table *r alpha*, the question item would be declared reliable and fit to be used in the research, but if the counted *r alpha* was less than the table *r alpha*, the question item would not be used in the research ⁹.

Data analysis

This research employed a bivariate analysis of Spearman's rank correlation. Spearman's rank correlation, or Spearman's rho, is a test used to measure the correlation between two variables with ordinal data or with interval- or ratio-turned-ordinal data and to look at the fitness of the variables tested into equivalent group ¹⁰.

Results

Table 2 below presents the respondents' characteristics by age, education, and occupation. The majority of the respondents were factory workers aged 31 years on average (productive age). They mostly had high school or the equivalent as their latest formal education.

Table 2 General Data

Criteria		Frequency	Percentage (%)
Age	20–25	4	12.5%
	26–30	12	37.5%
	31–35	11	34.3%
	36–40	4	12.5%
	41–45	1	3.1%
Education	Elementary school/equivalent	3	9.3%
	Junior high school/ equivalent	8	25%
	Senior high school/ equivalent	20	62.5%
	Diploma	1	3.1%
Occupation	Private employee	1	3.1%
	Cleaning service staff	1	3.1%
	Factory worker	30	93.7%

The specific data presented in Table 3 were collected from the questionnaire responses. The data were comprised of six components: distribution of exclusive breastfeeding information; source of exclusive breastfeeding information; lactation facility availability at workplace; exclusive breastfeeding practice; exclusive breastfeeding motivation; and workload.

Table 3 Special Data from Working Mothers' Questionnaire Responses

General Data		Frequency	Percentage
Exclusive breastfeeding information	Received	31	96.8%
	Not received	1	3.1%

Cont... Table 3 Special Data from Working Mothers' Questionnaire Responses

Source of information	Health professional	15	48.3%
	Electronic media	1	3.2%
	Mass media	1	3.2%
	Mass media and electronic media	3	9.6%
	Health professional, PKK* gathering, workplace	1	3.2%
	Health professional and PKK* gathering	2	6.4%
	Health professional and mass media	2	6.4%
	Health professional, electronic media, and PKK* gathering	4	12.9%
	Pregnancy club	1	3.2%
	Workplace	1	3.2%
Lactation facility at workplace	Available	30	93.7%
	Unavailable	2	6.25%
Exclusive breastfeeding practice	Engaged	15	46.8%
	Unengaged	17	53.1%
Workload	Level 2	1	3.1%
	Level 3	31	96.8%
Exclusive breastfeeding motivation	Strong	30	93.7%
	Medium	2	6.25%

*PKK: Family Welfare Guidance Program

Table 3 provides a picture that the respondents mostly had strong exclusive breastfeeding motivation. It was supported by their knowledge on exclusive breastfeeding virtually all of them possessed, lactation facility availability at the workplaces at which most of them worked, and counselling from a range of parties, such as health professionals, mass, and electronic media. Despite all of the previously stated, only half of the total respondents did practice exclusive breastfeeding.

Spearman's rho was used to analyze the relationship between workload and working mothers' exclusive breastfeeding motivation. The results are as presented in Table 4, where it can be seen that the p -value was 0.801 (> 0.05).

Table 4 Cross-tabulation of Workload and Working Mothers’ Exclusive Breastfeeding Motivation

	Exclusive Breastfeeding Motivation				
		Strong	Percentage	Medium	Percentage
Workload	Level 2	1	3.1%	0	0%
	Level 3	29	90.6%	2	6.25%
	Total	30	93.7%	2	6.25%
Spearman’s rho (ρ) = 0.801					
Correlation coefficient = 0.046					

Discussion

This research aimed to analyze the correlation between workload and the exclusive breastfeeding motivation of working mothers in the working area of the Public Health Center of Bergas District, Semarang Regency. As indicated by the data above, the factors included in the respondents’ workload were working hours, rest time, off-day frequency, and age, so there was an agreement between the theory and the fact ¹¹. It was found that there was no or negligible correlation between workload and the exclusive breastfeeding motivation of working mothers as shown by the correlation coefficient of 0.046 (0.00–0.20) in Table 4. It is known that the higher the workload, the higher the level of fatigue ¹². Workload has long been measured by fatigue indicator as fatigue is resulted from unreasonable workload.

The factors influencing strong motivation of their respondents, as were in this research, including possession of adequate information from health personnels, mass media, electronic media, workplace, or regular events in residential neighborhood and availability of lactation facility at workplace ¹³. An additional factor was the fact that most of the respondents were in their adulthood. Institution-initiated programs, activities, and campaigns pertaining to exclusive breastfeeding promotion in this context could also influence the exclusive breastfeeding motivation of working mothers ⁴.

The last aspect was the motivation triggered by moving information from media to do something.

In this instance, bottle-feeding as well as exclusive breastfeeding promotions affected one’s decision to exclusively breastfeed. It was as found in the present study that the respondents had gained information regarding the importance of exclusive breastfeeding in the first six months in baby’s life through media, either print or electronic ¹⁴. Motivation is aroused by the desire to achieve a goal, hope, and belief that the action taken will lead to a reward. Hence, if the desire, hope, and belief are high, an individual’s motivation will also be high, and vice versa ¹⁵.

Conclusion

The results of this research indicated that workload was not related to exclusive breastfeeding motivation, although the respondents’ workload belonged to Level 3 category with an FLS score within the 9–18 score range. The strong motivation of most of the working mothers in this research was driven by strong social support from the environment. The factors involved in the respondents’ reinforcement system positively impacted their belief, desire, and hope.

Statement of Informed Consent

Upon acceptance, all copyright ownership for the above-named paper is transferred to Indian Journal of Forensic Medicine & Toxicology. We, the undersigned authors of this paper, have contributed to (1) data design, analysis, or interpretation, and (2) writing or critiquing drafts of the manuscript, and we approve the submitted

version of the manuscript. We declare that this paper has not been published elsewhere in whole or in part in any language (except in abstract form). We are jointly responsible for the release of any or all of the material contained within the paper. We declare that we obtained patient consent-to-disclose forms for any figures of identifiable patients and edited out any names mentioned in the recording.

The consent form indicated specific use (reproduction in the medical literature in print and online, with the understanding that patients and the public will have access) of the patient's medical information and any images and contained the patient's signature or that of a legal guardian. We also declare that research involving human subjects was performed in compliance with the principles of the Declaration of Helsinki (2008), and that involving animals was approved by the applicable institutional ethics committee or review board and conformed with generally accepted guidelines governing such work. We further attest that we have herein disclosed any and all financial and other relationships that could be construed as conflicts of interest, and that all sources of financial support for this study are disclosed in the manuscript.

Ethical Clearance

This research process is done that was accordant with the ethical research principle based on the regulation of research ethic committee. The present study was carried out in accordance with the research principles. This study implemented the basic principle ethics of respect, beneficence, nonmaleficence, and justice.

Conflict of Interest: We declare that there is no report or issue about conflict of interest related with this paper.

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