

# Occupational stress in hospital settings: review of coping strategies of nursing professionals

Estresse ocupacional no ambiente hospitalar: revisão das estratégias de enfrentamento dos trabalhadores de Enfermagem

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**ABSTRACT | Background:** The nursing work process might contribute to the development of occupational stress, as it demands considerable attention and responsibility. Workers have resource to strategies to cope with stressors in the workplace. Coping strategies are ways to manage stress and minimize the effects of stressors to preserve the physical and emotional well-being. **Objective:** To identify through a literature review the strategies to cope with occupational stress adopted by hospital nursing professionals. **Method:** A literature search was conducted in databases Latin American and Caribbean Health Sciences Literature (LILACS) and Nursing Database (BDENF) via Virtual Health Library (VHL) and Scientific Electronic Library Online (SciELO). **Results:** Twenty-five studies were selected, 14 with quantitative, 9 with qualitative, and 2 with quantitative–qualitative approach. The located coping strategies were categorized according to the Coping with Job Stress (CJS) scale which classifies ways to cope with problems in the workplace under three categories: control, escape and symptom management. On these grounds, our literature review identified 4 control, 8 escape and 7 symptom management strategies. **Conclusions:** Control strategies were considered efficacious to manage stress. **Keywords |** adaptation, psychological; stress, psychological; nursing.

**RESUMO | Introdução:** O processo de trabalho da Enfermagem pode contribuir para o estresse ocupacional, visto que é um trabalho que demanda muita atenção e responsabilidade. Para superar os estressores presentes no ambiente de trabalho são empregadas estratégias de enfrentamento do estresse, que são maneiras como o indivíduo lida com o estresse, minimizando os efeitos dos estressores no organismo, visando ao bem-estar físico e emocional. **Objetivo:** Identificar as estratégias de enfrentamento do estresse ocupacional dos trabalhadores de Enfermagem no ambiente hospitalar, por meio de uma revisão bibliográfica. **Método:** Pesquisa bibliográfica nas bases de dados Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS) e Base de Dados de Enfermagem (BDENF), por meio da Biblioteca Virtual em Saúde (BVS) e Scientific Electronic Library Online (SciELO). **Resultados:** Foram selecionados 25 artigos, sendo 14 com abordagem quantitativa, 9 qualitativas e 2 quanti-qualitativas. As estratégias de enfrentamento encontradas na literatura foram classificadas de acordo com a escala Estratégias de Coping Ocupacional, que classifica em três categorias o modo como os indivíduos lidam/enfrentam os problemas do ambiente de trabalho: controle, esquiva e manejo de sintomas. Assim, foram encontradas, na literatura pesquisada, quatro estratégias de controle, oito de esquiva e sete de manejo de sintomas. **Conclusão:** As estratégias de controle foram avaliadas como eficazes para o enfrentamento do estresse.

**Palavras-chave |** adaptação psicológica; estresse psicológico; enfermagem.

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## INTRODUCTION

Nursing work is characterized by fast pace, personnel shortage — resulting in work overload, need to accomplish tasks quickly, short rest breaks, lack of autonomy, excessive institutional authority, close supervision, and lack of communication. The result is chronic stress, and consequent mental overload<sup>1</sup>.

Stress is any physical or mental pressure, or cumulated pressure, caused by stressors which destabilize individuals. It is an adaptive response, a reaction to emergency situations. Stressors might be external (external sources of stress, e.g., an individual's occupation) or internal (internal sources of stress, arising within the individual, as e.g., their personality)<sup>2</sup>.

In low levels, stress is desirable and beneficial, because it increases the disposition, interest, enthusiasm and attention of workers, and thus also their productivity. However, in high levels stress might be harmful, inasmuch as it causes fatigue, irritability, depression and lack of concentration. Therefore, it has negative impact on the work environment and reduces productivity<sup>2</sup>.

Occupational stress is the condition in which workers see the job demands as stressors which exceed their coping ability, and thus trigger negative responses<sup>3</sup>. It might be associated with reduced productivity and poorer quality of the work done, increased absenteeism (non-scheduled missed work days), high turnover, and accidents. It might further result in financial harm to institutions, and damage to the health of workers, in addition to interfering with the quality of services<sup>4</sup>.

The nursing work process might contribute to the occurrence of occupational stress, as it demands considerable attention and responsibility<sup>5</sup>. Double shifts, in the case of some professionals, favor tiredness and reduce the time available for self-care, strain interpersonal relationships among professionals, with patients and their relatives, compel professionals to work in environments where tasks are exhausting and they must perform complex procedures, reduce the number of available nursing professionals, shortens the time available to accomplish tasks, and limit resources<sup>6</sup>.

Occupational stress is a fact in the lives of nursing professionals, and to overcome stressful situations these professionals have resource to coping strategies<sup>7,8</sup>.

Coping strategies are cognitive, behavioral or emotional mechanisms individuals develop to manage stressful situations and maintain their mental and physical integrity. In other words, they are ways to manage stress, and minimize the effects of stressors to promote physical and emotional well-being<sup>9</sup>.

Coping strategies are categorized as emotion-focused and problem-focused. The former seek to control emotions triggered by stressors, for instance, talking about one's feelings with someone. The latter consist in finding a solution to the problem which is the cause of stress, e.g., to look for orientation. Both types of strategies might be used concomitantly in the combat against stressors<sup>10</sup>.

Given the aforementioned considerations, and seeking to contribute to the knowledge on coping methods and strategies in hospital settings, the aim of the present study was to investigate strategies to cope with occupational stress adopted by nursing professionals by means of a literature review.

## METHOD

The present study consisted in a descriptive literature review with quantitative analysis of the data. The search was conducted in databases Latin American and Caribbean Health Sciences Literature (LILACS), Nursing Database (BDENF) via Virtual Health Library (VHL) and *Scientific Electronic Library Online* (SciELO).

The literature survey, performed in May and June 2017, was oriented by question "What strategies nursing professionals adopt to cope with occupational stress in hospital settings?" and Health Sciences Descriptors (DeCS) "psychological adaptation," "psychological stress," "professional exhaustion," "nursing assistants," "nursing human resources," "nursing human resources in the hospital," "nursing staff," "nursing," "nursing technicians" and "occupational health."

The search in VHL and SciELO was performed based on combinations of descriptors to a total of 21 possible combinations. The following inclusion criteria were applied to each combination: publication from 2007 to 2017, in Portuguese, and with full text available online. Dissertations, bulletins, systematic or integrative reviews,

duplicates, studies unrelated to the subject of interest, conducted at other work settings, or with other professional categories were excluded.

The 21 combinations allowed locating 33,878 studies in VHL. Following application of the inclusion criteria, the number decreased to 1,631, and after application of the exclusion criteria it decreased to 37.

Relative to SciELO, 402 studies were initially located and then reduced to 347 and 3, following application of the inclusion and exclusion criteria, respectively.

The total number of studies selected for review was therefore 40; titles and abstracts were analyzed by all the investigators to identify coping strategies. As a result, 25 studies which met the aims of the present review were selected, and 15 were excluded.

## RESULTS

Twenty-five articles were selected, 14 with quantitative approach, 9 with qualitative approach, and 2 with quantitative–qualitative approach (Table 1).

## DISCUSSION

To categorize the results, the coping strategies found in the selected studies were classified according to the “Coping with Job Stress” (CJS) scale.

CJS is a scale developed to measure coping with stress in the workplace, and was adapted for use in Brazil in 2003<sup>36</sup>. It comprises 22 items which investigate how people cope with problems in the workplace, distributed across three domains: control (11 items), escape (9 items) and symptom management (9 items)<sup>17</sup>.

Domain control includes actions and reappraisals which have a take–charge tone; escape consists of actions and reappraisals which suggest an escapist, avoidance mode; and symptom management encompasses relaxing and physical activities as ways to cope with stress<sup>37</sup>.

### CONTROL STRATEGIES TO COPE WITH OCCUPATIONAL STRESS

Among the control strategies found in the analyzed studies, problem solving was the most frequently

mentioned. In this case, workers become aware the environmental demands, and proactively seek to modify stressful situations as a way of coping. The results of our literature review allow inferring that problem solving is an effective coping strategy which results in low levels of stress<sup>12,14-17,25-29,34,35</sup>.

However, one study conducted with 18 nurses in an onco-hematology unit found that the severity of stress increased when problem solving was used as coping strategy. The reason is that the onco-hematology setting is characterized by chronic patients under unstable clinical conditions and the consequent emotional repercussion, which hinder nurses from proactively seeking to solve problems<sup>18</sup>.

Seeking social support was also frequently mentioned. In this case, workers look for educational, emotional and / or informational support from individuals in the workplace. Analysis of the literature showed that seeking support is an efficacious coping strategy, without negative impact on the care provided to patients. Dialogue affords relief to professionals, and reduces the tension caused by stress<sup>12-16,20,25-27,29,34</sup>. However, in a study conducted with nursing professionals who provide care to potential organ donors in an intensive care unit (ICU), the institution — as most hospitals — did not provide any support, as there was not any specialized professional available for this purpose<sup>20</sup>.

Positive reappraisal concerns cognitive strategies intended to help in accepting reality. Individuals focus on aspects which might relieve stress, or on positive aspects to reduce the emotional load of a situation, thus redirecting stressors. In a study with nursing professionals who provide care to potential organ donors in ICU, the participants who reported to use this strategy observed that they see organ donation as an opportunity for recipients to live, which makes them feel their work is not in vain<sup>20</sup>. The professionals who have resource to this strategy succeed in coping with stress in an efficacious manner in a way it does not interfere with their performance at work or personal lives<sup>12,15,16,20,24-27,29,30,35</sup>.

Active coping basically seeks to solve stressful situations through the formulation of solutions. Adoption of this coping strategy might be related to the level of academic training of professionals and the availability of adequate social support<sup>24</sup>.

**Table 1.** Characterization of the selected studies according to authors, publication year, type of study, sample and coping strategies, 2017.

Authors	Year	Type of study	Sample	Coping strategies
Kolhs et al. <sup>11</sup>	2017	Qualitative	34	<ul style="list-style-type: none"> <li>Individual strategies: getting it off one's chest with some relative at home, leisure / physical activities, self-controlling, silence, letting it all out and crying</li> <li>Collective strategies: unity, friendship and talks with staff / professionals, having a good time with patients and staff</li> </ul>
Moraes et al. <sup>12</sup>	2016	Quantitative	23	<ul style="list-style-type: none"> <li>Self-controlling</li> <li>Positive reappraisal</li> <li>Social support</li> <li>Distancing</li> <li>Problem solving</li> </ul>
Miorin et al. <sup>13</sup>	2016	Qualitative	13	<ul style="list-style-type: none"> <li>Avoiding any relationship with patients—emotional barrier</li> <li>Talks with staff—expressing feelings</li> <li>Leisure (gym, reading)</li> <li>Religiousness</li> </ul>
Silva et al. <sup>14</sup>	2015	Quantitative	193	<ul style="list-style-type: none"> <li>Problem-focused coping (approaching stressors to solve stress-causing situations, managing or modifying problems)</li> <li>Seeking social support (instrumental, emotional and / or informational support in the workplace)</li> </ul>
Benetti et al. <sup>15</sup>	2015	Quantitative	209	<ul style="list-style-type: none"> <li>Positive reappraisal</li> <li>Social support</li> <li>Problem solving</li> </ul>
Ribeiro et al. <sup>16</sup>	2015	Quantitative	89	<p>In order of frequency:</p> <ul style="list-style-type: none"> <li>Problem solving</li> <li>Positive reappraisal</li> <li>Social support</li> <li>Accepting responsibility</li> <li>Self-controlling</li> <li>Escape-avoidance</li> <li>Distancing</li> <li>Confrontation</li> </ul>
Umann et al. <sup>17</sup>	2014	Quantitative	129	<ul style="list-style-type: none"> <li>Control (most frequently used in units for admission of critical or potentially critical patients)</li> <li>Symptom management (most frequently used in the nephrology unit)</li> </ul>
Umann et al. <sup>18</sup>	2014	Quantitative	18	<ul style="list-style-type: none"> <li>Control</li> <li>Avoidance</li> <li>Symptoms managing</li> </ul>
Monteiro et al. <sup>19</sup>	2013	Quantitative-qualitative	8	<ul style="list-style-type: none"> <li>Denial and dismissal of suffering</li> <li>Rationalization</li> <li>No personal / human contact with patients</li> <li>Avoidance or quitting the profession</li> <li>Staying calm / quiet</li> <li>Paying more attention at work</li> <li>Change of hospital section</li> <li>Self-help books, swimming</li> <li>Therapy to cope with patients' death</li> </ul>

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**Table 1.** Continuation.

Authors	Year	Type of study	Sample	Coping strategies
Souza et al. <sup>20</sup>	2013	Qualitative	14	<ul style="list-style-type: none"> <li>Emotion-focused: escape-avoidance and positive reappraisal</li> <li>Problem-focused: accepting responsibility (providing competent care) and seeking social support</li> </ul>
Kleinubing et al. <sup>21</sup>	2013	Quantitative	12	<ul style="list-style-type: none"> <li>Control</li> <li>Escape-avoidance</li> <li>Symptom management</li> </ul>
Umann et al. <sup>22</sup>	2013	Quantitative	18	<ul style="list-style-type: none"> <li>Control</li> <li>Avoidance</li> <li>Symptom management</li> </ul>
Jaskowiak et al. <sup>23</sup>	2013	Qualitative	11	<ul style="list-style-type: none"> <li>Religiousness</li> <li>Medication (amitriptyline)</li> </ul>
Gomes et al. <sup>24</sup>	2013	Quantitative	96	<ul style="list-style-type: none"> <li>Planning</li> <li>Active coping</li> <li>Acceptance</li> <li>Distractions</li> <li>Positive reappraisal</li> </ul>
Guido et al. <sup>25</sup>	2012	Quantitative	9	<ul style="list-style-type: none"> <li>Problem solving</li> <li>Positive reappraisal</li> <li>Social support</li> <li>Escape-avoidance</li> </ul>
Guido et al. <sup>26</sup>	2011	Quantitative	143	<ul style="list-style-type: none"> <li>Problem solving</li> <li>Positive reappraisal</li> <li>Social support</li> <li>Escape-avoidance</li> <li>Accepting responsibility</li> <li>Self-controlling</li> <li>Distancing</li> <li>Confrontation</li> </ul>
Negromonte and Araujo <sup>27</sup>	2011	Quantitative	31	<ul style="list-style-type: none"> <li>Positive reappraisal</li> <li>Accepting responsibility</li> <li>Social support</li> <li>Distancing</li> <li>Problem solving</li> <li>Self-controlling</li> <li>Confrontation</li> <li>Escape-avoidance</li> </ul>
Hanzelmann and Passos <sup>28</sup>	2010	Qualitative	25	<ul style="list-style-type: none"> <li>Getting rid of responsibility (transferal of problems to supervisors)</li> <li>Problem sublimation (escape)</li> <li>Foreseeing and solving problems</li> </ul>

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**Table 1.** Continuation.

Authors	Year	Type of study	Sample	Coping strategies
Silveira et al. <sup>29</sup>	2009	Quantitative	19	<ul style="list-style-type: none"> <li>Strategies in the workplace: establishing and maintaining dialogue; putting oneself in the other's place; mutual help among colleagues; solving conflict; seeking professional improvement; good humor; calm; attention; cordiality and respect to employees, patients and their relatives; not conveying one's stress to patients; providing more humane care of high technical quality resulting in personal satisfaction</li> <li>Strategies outside the workplace: leisure activities; visiting the beauty salon; meditation; relaxing; massage; psychotherapy; spending time with family; forgetting what happened at the hospital; giving the due value to life outside the hospital; having time for oneself</li> </ul>
Pereira et al. <sup>30</sup>	2009	Qualitative	28	<ul style="list-style-type: none"> <li>Staying away from the unit for a while</li> <li>Focusing on work activities</li> <li>Breathing deep and reflecting on the relevance of one's job</li> <li>Leisure activities after shifts</li> <li></li> </ul>
Martins and Robazzi <sup>31</sup>	2009	Qualitative	8	<ul style="list-style-type: none"> <li>Seeking support in religiousness</li> <li>Staff support and friendship</li> <li>Physical activity</li> <li>Distancing oneself from terminal patients and not involving oneself with relatives</li> </ul>
Salomé et al. <sup>32</sup>	2009	Qualitative	14	<ul style="list-style-type: none"> <li>Alternative medicine (Bach flower remedies, Reiki)</li> <li>Relaxing (baths) and listening to music at home</li> </ul>
Pagliari et al. <sup>33</sup>	2008	Qualitative	11	<ul style="list-style-type: none"> <li>Denial</li> <li>Escape</li> <li>Seeking nursing supervisors or other members of the multiprofessional staff</li> </ul>
Calderero et al. <sup>34</sup>	2008	Quantitative-qualitative	45	<ul style="list-style-type: none"> <li>Avoidance (forgetting stressors, blocking emotions, delaying confrontation)</li> <li>Direct confrontation (speaking about problems, negotiating alternatives)</li> <li>Indirect confrontation (releasing tension—religiousness, sports)</li> </ul>
Rodrigues and Chaves <sup>35</sup>	2008	Quantitative	77	<ul style="list-style-type: none"> <li>Positive reappraisal</li> <li>Problem solving</li> <li>Self-controlling</li> </ul>

## ESCAPE STRATEGIES TO COPE WITH OCCUPATIONAL STRESS

Among the escape strategies found in the surveyed literature, avoidance of problems was the most frequently mentioned. In this case, workers seek to attenuate the unpleasant feelings triggered by stressors by trying not to

think or talk about them. Thus they avoid the feelings a stressful situation might cause, but without any change in the stressors as such. Workers who have resource to this strategy succeed in coping with stressors, distance themselves from problems they are not able to confront, and thus manage to keep hold of the situation<sup>12,16,18-22,25-28,33,34</sup>.

However, in a study with nursing professionals who provide care to potential organ donors in ICU, use of this strategy contributed to repress feelings and caused fatigue, stress and tiredness<sup>20</sup>.

Increasing the attention paid to work — also known as accepting responsibility — was one further strategy mentioned. In this case, workers acknowledge the part they have in a given problem and the situation, and seek to cope with it by involving themselves deeper in patient care tasks as a way to escape suffering. Workers who have resource to this strategy succeed in coping efficaciously with stress in a way it does not interfere with the quality of their work or their personal lives<sup>16,19,26,27,29,30</sup>. However, in a study with nursing professionals who provide care to potential organ donors in ICU, use of this strategy was not always effective to cope with stress, as it might simply be a way to avoid facing problems<sup>20</sup>.

Through emotional barriers, workers avoid developing affective ties to patients and their relatives, but prioritize tasks related with the patient rehabilitation as a way to avoid suffering. Avoiding bonding is a mechanism of defense against stress, as it allows workers distance themselves from the situation patients and relatives undergo, and thus it attenuates their own suffering<sup>13,19,31,34</sup>. In a study performed with ICU nurses, the reason for the professionals to distance themselves from imminent death was lack of preparation to cope with it, as the focus of undergraduate courses is on healing, saving lives, preventing diseases and promoting health<sup>31</sup>.

Attempts at transferring responsibility to nursing supervisors or other members of the multiprofessional staff was seldom mentioned (two studies only). To minimize stressors in the workplace, nursing professionals seek to transfer stress-causing problems to be solved by other professionals, often the chief nurse or nursing supervisors<sup>28</sup>.

Leaving the workplace for a while is a strategy used for distraction and to have room for psychological reorganization vis-à-vis stress-causing problems. It is an efficacious coping strategy, according to a study conducted with nursing professionals allocated to isolated units, as it helps them cope with stressors in a way they do not interfere with their work or personal lives<sup>30</sup>.

Denial and dismissal of suffering means resistance to acknowledge one's own pain and the others' suffering not to lose the emotional balance when admitting such feelings

might be embarrassing. This strategy is not efficacious to reduce stress, because workers hide behind technical procedures and do not show themselves as the human beings they are<sup>19</sup>.

Rationalization via simple and logic interpretations does decrease anguish, fear and insecurity in work-related situations, as e.g., coping with death<sup>19</sup>.

Change of hospital section / quitting the profession are triggered by too high levels of stress beyond the workers' ability to cope with them, and thus have negative impact on the work environment and personal life, which thus motivates these decisions<sup>19</sup>.

## OCCUPATIONAL STRESS SYMPTOM MANAGEMENT STRATEGIES

Among the symptom management strategies found in the analyzed publications, self-controlling was the most frequently mentioned. In this case, workers analyze a given situation to decide on what they will do, and thus avoid impulsive and unnecessary attitudes which might give raise to feelings of guilt and suffering. They try to control their feelings and actions in the presence of stressors in a way they can manage their behavior<sup>12</sup>. This is an individual strategy to cope with adverse and stressful situations in the workplace and thus minimize stress<sup>11,19,26,27,35</sup>.

A study conducted with nursing professionals allocated to the emergency department of a large hospital found that self-controlling is indispensable in such setting, as situations are unpredictable and demand effective decision making<sup>16</sup>.

Participating in leisure activities is also a strategy adopted by nursing professionals. Practices such as relaxing are beneficial to the mental health of workers, and afford relief against stress and fatigue caused by daily exhausting situations in the workplace<sup>13</sup>. This strategy is efficacious to manage stressors in the workplace, because it improves the workers' quality of life and has no negative impact on the care provided to patients<sup>11,13,29,30</sup>.

Physical activity was mentioned as a strategy to cope with stress. Exercising helps release tension in the attempt to maintain the internal balance<sup>34</sup>. It contributes to improve the quality of life of workers, and thus to reduce stress and anxiety in the short run<sup>31</sup>. Endorphins are released, which promote well-being and self-esteem, and thus behave as therapy for all the dimensions of human beings<sup>11</sup>.

Seeking support in religion was a strategy mentioned in the analyzed studies. Attachment to religion, belief in higher powers, helps workers manage stress, and thus represents hope and faith, and behaves as a center of balance within stressful work-related situations<sup>23,24</sup>. Seeking support in faith has direct relationship with the care provided to patients, influences the empathy toward patients, and helps equalizing existential dimensions<sup>13</sup>.

In a study conducted with ICU nurses, strategies to vent off stress, such as religiosity, were found to be relevant in daily practice. However, when they are the single strategy used to cope with suffering, they might alienate the professionals and increase their suffering<sup>31</sup>.

Letting emotions flow was also mentioned as a coping strategy, however, with some qualifications, as while family ties are a source of pleasure and well-being, and contribute to psychosocial health, giving vent to one's feelings requires caution, because work-related problems intrude the family space and might interfere with the family dynamics<sup>11</sup>.

Relaxing after shifts, including baths and listening to music, is a strategy that promotes physical and mental relaxation and feelings of pleasure, which consequent relief of stress. This strategy is considered efficacious to attenuate occupational stress<sup>29,32</sup>.

Alternative therapies, such as Bach flower remedies and Reiki, are used to relieve stress. Nursing professionals have resource to these methods, which are considered effective to relieve occupational stress and promote well-being, based on alternative and more humane actions<sup>32</sup>.

Some authors mentioned, but did not discuss in depth, some coping strategies, such as: keeping oneself in good humor, therapy to cope with patients' death, reading self-help books, meditation, massage, psychotherapy, spending time with the family, and medication to achieve emotional control.

## CONCLUSION

Control strategies were considered efficacious to cope with stress. However, escape strategies are not effective, as they only serve to avoid, but do not solve problems, which thus remain untouched. Symptom management strategies are efficacious, but when they are the single means used to cope with suffering they might alienate workers and increase their suffering, whereby they become ineffective.

Given that the choice of coping strategies depends on the individual characteristics of workers and the situations they experience in the workplace, having resource to several strategies is more efficacious than any single one, as the range of options to cope with stressful situations is wider.

Since stress cannot be eliminated from routine nursing practice, looking for coping strategies as an attempt to manage emotional damage is crucial. Workers might learn new coping strategies, for which reason starting or delving deeper in discussions on this subject among nursing professionals might be useful to improve their job satisfaction, which certainly reflects on the quality of their work, and consequently also on the quality of the care they provide to patients.

Identifying the coping strategies adopted by hospital nursing professionals might allow understanding how they face stressful situations, and contribute to the development of educational actions to prepare them to adopt strategies which effectively reduce occupational stress. The reason is that stress and its effects on the health of workers might be underestimated, while they are real and deserving of attention.

As limitations, in the present study we only looked for articles included in national databases and with full text available.

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