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NURSING ADHERENCE TO HAND HYGIENE ACCORDING HERZBERG'S HYGIENE FACTORS

ADESÃO DA ENFERMAGEM À HIGIENIZAÇÃO DAS MÃOS SEGUNDO OS FATORES HIGIÊNICOS DE HERZBERG

ADHERENCIA DE LA ENFERMERÍA A LA HIGIENIZACIÓN DE LAS MANOS SEGÚN LOS FACTORES HIGIÊNICOS DE HERZBERG

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ABSTRACT

Objective: to identify hygienic factors in the motivational process of nursing professionals to adhere to hand hygiene in the hospital environment. **Method:** cross-sectional study with 135 nursing professionals who answered a questionnaire with 48 questions. Univariate exploratory analysis (single frequencies, percentages, mean, median and standard deviation) were conducted. **Results:** the hygienic factors salary, social benefits, interpersonal relationships, workplace conditions and institutional policies did not affect adherence to this practice and they operate independently from motivational factors. Strategies for participation of these in the definition of continued education are recommended. **Conclusion:** it was concluded that hygienic factors minimize job dissatisfaction but do not ensure satisfaction and adherence to HH. **Descriptors:** Handwashing; Asepsis; Motivation; Nursing Staff.

RESUMO

Objetivo: identificar os fatores higiênicos no processo motivacional dos profissionais de enfermagem para adesão à higiene das mãos em ambiente hospitalar. **Método:** estudo seccional/transversal, com 135 profissionais da enfermagem que responderam a um questionário com 48 questões. Realizou-se análise exploratória univariada (frequências simples, porcentagens, média, mediana e desvio padrão). **Resultados:** os fatores higiênicos salário, benefícios sociais, relações interpessoais, condições do ambiente de trabalho e políticas institucionais não influenciaram sua adesão a esta prática e operam independente dos fatores motivacionais. Recomendam-se estratégias para participação destes na definição da educação permanente. **Conclusão:** concluiu-se que os fatores higiênicos minimizam a insatisfação no trabalho, porém não asseguram satisfação e adesão à HM. **Descritores:** Lavagem das Mãos; Assepsia; Motivação; Equipe de Enfermagem.

RESUMEN

Objetivo: identificar los factores higiênicos en el proceso motivacional de los profesionales de enfermería para adherencia a la higiene de las manos en ambiente hospitalario. **Método:** estudio seccional/transversal, con 135 profesionales de enfermería que respondieron a un cuestionario con 48 preguntas. Se realizó análisis exploratorio uni-variado (frecuencias simples, porcentajes, media, mediana y desvió padrón). **Resultados:** los factores higiênicos salario, beneficios sociales, relaciones interpersonales, condiciones del ambiente de trabajo y políticas institucionales no influyen su adherencia a esta práctica y operan independientemente de los factores motivacionales. Se recomiendan estrategias para participación de estos en la definición de la educación permanente. **Conclusión:** se concluye que los factores higiênicos minimizan la insatisfacción en el trabajo, sin embargo no aseguran satisfacción y adherencia a la HM. **Descriptores:** Lavado de las Manos; Asepsia; Motivación; Equipo de Enfermería.

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INTRODUCTION

There is a variety of etiologic agents defining a specific microbiological profile in health-care establishments. Currently, the safety of patient care in health services has hand hygiene (HH) as one priority recommended by the World Health Organization (WHO) from 2005 onwards, with the global challenge to patient safety. The quality of health care is intrinsically related to the constant monitoring of risks.^{1,2}

Personnel management is an important aspect of the evaluation and resolution of problems in health services, considered the core of managerial discussions, since professionals' satisfaction is fundamental to the achievement of organizational goals.

Excessive workload can lead to burnout and professional dissatisfaction with consequent increasing rates of absenteeism and turnover, what compromises goals and institutional image. In some realities of our country, improper size of nursing staff is associated with increased health care-associated infections (HAIs). However, this should not justify the lack of adherence to HH and other procedures that ensure the quality of care.²

The high demand for nursing care, particularly by patients of greater complexity and severe state, causes extra work and responsibilities to nurses. As a result of this overload, nurses delegate the care to nursing assistants and technicians.³⁻⁴

One of the measures to qualify the assistance provided in health care services is the HAIs index whose prevention and control involve the practice of hand hygiene (HH). This is a simple and fundamental procedure valid for any context, although studies indicate rates of adherence below 60% in different situations.^{1,5}

Despite theoretical models and assessment tools for motivation and performance of work, there is very little investment directly involving nursing professionals in Brazil. Human motivation is a set of dynamic factors of personality that determines a motivational behaviour, such as intelligence, emotions, instincts and experiences to achieve goals.⁶

Situations that induce motivation in the work of health professionals have been little explored. Despite the own organizational systems, these have not provided adequate conditions for their workers.^{4,7,8}

The two-factor theory of the American psychologist Frederick Herzberg for industrial context in the mid-twentieth century, can serve as a model to understand the motivation

with identification of critical points and creation of self-development and organizational training strategies in health services.⁸⁻¹⁰

The study of human behaviour in the workplace indicates significant differences between satisfaction and motivation. Job satisfaction ensures greater stability in the organization, reduces turnover, low productivity maintenance and positive attitudes for motivation. In turn, the motivation leads the individual to become more responsible, increasing productivity and quality of work.^{9,10}

The factors leading to job satisfaction, called *hygienic factors*, refer to the physical conditions, salaries, benefits and safety at work. In turn, factors that stimulate motivation in the worker are *motivational factors* and are focused on the task (the work itself) and its implementation, including the freedom to search for personal and unique ways to achieve the results, to create and to innovate. They include feelings of personal growth and professional recognition, focused on the individual's self-fulfilment for challenging tasks and their meanings.^{3,10-1}

Considering the applicability of the Herzberg's two-factor theory, based on the basic human needs of Maslow, the analysis of hygienic and motivational factors at work can contribute to the deepening and understanding of adherence to HH. Studies have shown that provision of materials and supplies does not ensure that aseptic practice in health care and indicate the need to explore behavioural aspects of the professionals involved.^{1,5}

Thus, this study aimed to:

- identify hygienic factors in the motivational process of nursing professionals to adhere HH in hospital;
- associate sociodemographic characteristics with the adherence of nursing professionals to HH according to the Hygienic Factors of Frederick Herzberg, knowledge and participation in continued educational activities.

METHODOLOGY

Sectional/cross-sectional study conducted at a general public state hospital of northern Paraná, a hospital of medium size with nearly 170 nursing professionals (approval in the CEP/EERP-USP 046417112.1.0000.5392).

The instrument for data collection included information on professional identification, knowledge of the five moments for the realization of HH, according to WHO, and

participation in continued education on the subject. Influence of hygienic factors on HH were also focused, factors such as salary and social benefits (four questions); relationship with bosses, supervisors and co-workers (seven items); physical and environmental conditions of work (six items); safety at work (one item); political and organizational guidelines and communication (five items) and status (one item). The domain of motivational Factors in its six categories includes: professional and personal accomplishment and acknowledgment (two items); responsibility (one item); professional development, personal growth and job content (three items); autonomy (one item); creativity and challenging work (two items); and participation in decisions (one item); totalling 34 items.⁸⁻¹⁰

This instrument has been validated by professionals, HAIs control experts and theorists (n = 50) whose content analysis, with semantic, operational and conceptual equivalence of items, identified adequacy of the domains: interpersonal relationships; professional acknowledgment; personal growth; participation in decisions; physical and environmental conditions of work with respect to hygienic and motivational factors of adherence to hand hygiene, according to Herzberg's Two-factor theory. There was agreement of validators of 83.5% for the items Motivational and Hygienic factors and 91.1% for Content Adherence to hand hygiene.

Each item of the instrument had five options of answer in Likert Scale, namely: (1) Disagree, (2) Disagree in part, (3) Neither agree nor disagree, (4) I agree in part, and (5) totally agree. These represented the codification of the options proposed in filling the database, that is, there was no binding minimum or maximum score as a parameter of valid responses to the study. It was possible to qualitatively measure, based on the response options for each of item, the trends of responses of participants, since there was not a previously established parameter considered correct answer.

All nursing professionals that were active during the period of data collection were invited to participate in the study, automatically excluding those who were absent for sick leave or vacation, resulting in a final sample of 135 professionals. Data were collected in the months of September and October 2012.

Variables were coded in a database (spreadsheet) in MS Excel XP, filling it with double entry to ensure the reliability of data collected. We conducted univariate

exploratory analysis (simple frequencies and percentages, mean, median and standard deviation) of the trends of the responses. These were categorized after analysis into hygienic factors that influence or do not influence on adherence to HH by study participants.

RESULTS

All participants (n = 135) had been working with nursing in the hospital area for more than one year. Sixteen professionals had other employment and were earning above R\$ 3,001.00 and among those with another job, 10 earn R\$ 2,001.00 to R\$ 3,000.00. Among the 104 respondents who worked only in this hospital, 15 earn more than R\$ 3,001.00. The majority of the 135 participants (101, 74.8%) were female, with total wage between R\$ 1,001.00 and R\$ 3,000.00, 7 were Nursing Assistants (NA), 82 were Nursing Technicians (NT), 11 Nurses of Assistance (NuA) and 1 was Head Nurse (HeN). Furthermore, 12 NT, 17 NuA and 2 Head Nurses/Administrative Position (HeN/AP) earned more than R\$ 3,001.00. Among the 135 nursing professionals, 112 (83%) employees worked at Medical/Surgical Clinics and at the Emergency Room, 58 (43%) and 54 (40%), respectively.

As for training on HH, prevention and control of hospital infections (HIs) in the last two years, 55 out of the 58 who worked in the Medical/Surgical Clinics had participated on such training, and 52 of them (94.5% of the 55 or 89, 6% of the 58) got correctly the five moments of HH. Three respondents who did not participate in training knew how to correctly name all five moments of HH. Among fifty-four professionals working in the Emergency Room, 52 (96.3%) had been trained and among these, 47 (90.4% of the 52 or 87.0% of the 54) hit correctly the five moments for HH, as indicated by WHO.

Among the seven professionals working at Paediatrics, five (71.4%) had received training, but the 7 (100%) knew to cite correctly the five moments of HH. In turn, among 16 professionals linked to other clinics, only 11 (68.8%) had received training, but all of them (100%) correctly referred to the five moments.

Therefore, among the 123 (91.1%) respondents who had received training on HH and control of HIs in the last two years, only 8 (5.9%) were unable to give correct answer about the five moments.

We present in the *table 1* the influence or lack of influence of hygienic factors with

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respect to adherence to HH from the perspective of nursing professionals.

With respect to hygienic factors in relation to HH practice, the variables *salary* and *social benefits*, there was total disagreement (125, 92.6%) about the *influence of salary on adherence to HH*.

Regarding the influence of *task overload* on HH, a balance between disagreement (64, 47.4%) and agreement (66, 48.9%) was observed. Disagreement (66, 48.9%) and agreement (60, 44.5%) were nearly equally frequent with respect to the influence of *incentive to participate in courses*. The majority of participants totally disagreed (111, 82.2%) with respect to the influence of *career plan, promotions and awards* on HH.

Interpersonal skills, in the opinion of the majority of nursing professionals (103, 76.3%), influences partially or completely the adherence of professionals when *the leadership incentives and performs HH* and in the opinion of 32 (23.7%) professionals this does not influence their adherence to HH. The influences of *direct supervision on the job or the presence of someone watching*; and *feel*

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that their heads respect them as a person and a professional, respectively, nearly half of respondents (67, 49.6%) agreed partially or completely with the influence on HH and disagreed (69, 51.1%).

With respect to the influences of *having affinity with colleagues* and *being disrespected by other professionals or feel that their needs are ignored*, there was total disagreement by the majority (90, 66.7% and 101, 74.8%, respectively).

With respect to the influences of *having affinity with colleagues* and *being disrespected by other professionals or feel that their needs are ignored*, there was total disagreement of its influence by the majority (90, 66.7% and 101, 74.8%, respectively). Most nursing professionals (90, 66.7%) agreed partially or completely that *their behaviour towards HH influence colleagues*. They totally disagreed (93, 68.9%) on the influence that the *sense of inferiority at work has on adherence to HH*.

Table 1. Distribution of the influence of hygienic factors in relation to adherence to hand hygiene according to nursing professionals. Londrina/PR, 2012.

Hygienic factors in adherence to HH	Influences n (%)	Does not influence n (%)
Salary and social benefits		
Salary	10 (7.4)	125 (92.6)
Task overload	71 (52.6)	64 (47.4)
Career plan, promotions and awards	24 (17.8)	111 (82.2)
Encouragement to participate in courses	79 (58.5)	56 (41.5)
Interpersonal relationship		
Leadership that stimulates and performs HH	103 (76.3)	32 (23.7)
Direct supervision at work or presence of someone watching	67 (49.6)	69 (51.1)
Leadership that respects you as a person and professional	91 (67.4)	44 (32.6)
Affinity with colleagues	45 (33.3)	90 (66.7)
Being disrespected by other professionals or feel that their needs are ignored	34 (25.2)	101 (74.8)
Behaviour toward HH influences colleagues	90 (66.7)	45 (33.3)
Feeling of inferiority at work	42 (31.1)	93 (68.9)
Physical and environmental conditions of work		
Quantity and quality of resources	116 (85.9)	19 (14.1)
Work shift	33 (24.5)	102 (75.5)
Time consumed for HH	59 (46.4)	76 (53.6)
Suspension of work activities in intervals for rest	36 (26.7)	99 (73.3)
Institution with structure and sufficient and adequate material resources, but poor interpersonal relationships	92 (68.2)	43 (31.8)
Use of advanced technologies at work	72 (53.3)	58 (43.0)
Safety at work		
Being on trial period at work	47 (34.8)	88 (65.2)
Political, organizational guidelines and communication		
New training strategies for HH	116 (85.9)	19 (14.1)
Users/patients evaluation on nursing care	79 (58.5)	56 (41.5)
Investment in human resources to adhere HH	78 (57.8)	57 (42.2)
Identification of your needs	78 (57.8)	57 (42.2)
Regulations and ordinances on HH to meet health practices	101 (74.8)	34 (25.2)
Acknowledgment at work (<i>status</i>)	54 (40.0)	81 (60.0)

With respect to *physical and environmental working conditions*, there was partial or full agreement by nursing professionals in relation to the influence of *quantity and quality of*

resources on adherence to HH (116, 85.9%). Regarding the influence of *work shift on adherence to HH* and *time necessary to carry it out*, 102 (75.5%) differed totally or partially

about the influence on the realization of HH and 76 (53.6%) also pointed this option, respectively.

On the other hand, *suspension of work activities in the intervals for the rest does not influence adherence* in the opinion of 99 (73.3%) participants and for 36 (26.7%), this factor contributes to adherence to HH. In the opinion of 92 (68.2%) participants, *an institution with structure and sufficient and adequate material resources, but with bad interpersonal relations, influences the adherence to HH*. The *use of advanced technology at work influences the practice of HH* for 72 (53.3%), but 58 (43%) disagreed.

Safety at work represented by Being on trial at work does not influence adherence to HH for 88 (65.2%) of the nurses and for 47 (34.8), it does influence. With respect to *Political, organizational guidelines and communication, and New training strategies for HH contribute to adherence in the opinion* of 116 (85.9%) nursing professionals and for 19 (14.1%), there is no influence; and *User/patients evaluation on nursing care also influence the membership of the HH* for 79 (58.5%) respondents and for 56 (41.5%) there is no influence on adherence to HH.

The *Investment in human resources to adhere HH* as well as *identification of your needs* influences in the opinion of 78 (57.8%) professionals and in the opinion of 57 (42.2%), it does not influence. *Rules and ordinances on HH meet the health practices* for 101 (74.8%) participants. The *Use of posters, pictures and cameras* influence the adherence to HH in the opinion of 100 (74.1%) participants and does not influence in the opinion of 34 (25.2%). These results may be related to electronic surveillance in all units of the institution.

The *acknowledgment at work (status) does not influence adherence in the opinion* of 81 (60%) nursing professionals and 54 (40.0%) reported influence of this factor on HH.

DISCUSSION

The distinctive profile, on the whole, of the professionals of this institution, with a significant number of nursing technicians with salaries above the national average, with full work shift of 12-hour, both night and day and in statutory labour scheme, may give room for the development of a less confrontational environment. This favours less stratified educational activities, in which the influence of hygienic factors for a behaviour of adherence to HH can be positive.^{3,4,10}

Maintaining annual continued education and acquiring knowledge, with an emphasis on

HH, prevention and control of HAIs presents satisfactory results in relation to knowledge, since most of the participants identified the five moments recommended for HH.

The disagreement of nursing professionals about the influence of salary, career plan, promotions and awards on adherence to HH, however, points out the close relationship between hygienic factors and environment and context of work. These conditions are decided and controlled by organizations and are out of control of workers. The offer of a healthcare plan as an extra benefit from the company will not make the worker give more in work. This benefit is welcome, because being healthy is essential to the exercise of any job or profession, but not having it generates dissatisfaction to the worker.¹²⁻³

The dissatisfaction of the worker may be associated with feelings of lack of acknowledgment and lack of self-fulfilment.^{10,13} Individuals who do not identify themselves with the profession tend to value aspects such as salary, working conditions, additional benefits (social benefits), safety, type of supervision, co-workers and administrative policy, to justify their little involvement with the work. Companies must invest in hygienic factors (Salary and social benefits; Relationship with bosses, supervisors and co-workers; Physical and environmental conditions of work; Safety at work; Political, organizational and communication guidelines and Status) and especially in motivational factors (Professional and personal accomplishment and acknowledgment; Responsibility; Professional development, personal growth, and job content; Autonomy; Creativity and challenging work; and participation in decisions) in the motivational process to work, because the combination of these two factors can increase the satisfaction of professionals in the hospital routine.^{3,9,10,12-3,18}

The financial compensation represents the possibility to be able to support the family, have vacations, pay for home repairs and debts as well as make future projects, the abstract part of the salary.^{10,13} Temporarily, the factor hygienic compensation determines behaviour, but over time, it does not ensure the commitment of professionals to carry out the work with quality, since many want the reward in form of autonomy, which has intrinsic character, which is the motivational factor of work. This can be applicable to the practice of HH recognized as one of the main aseptic measures to prevent horizontal transmission of microorganisms among professionals, patients and surfaces and can

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reduce the incidence of HI, in addition to the self-preservation of the physical and psychological integrity.⁷

The nurse's behaviour, that encourages and performs HH, influences adherence of its staff as it is considered a model to be followed, for being in the leadership.^{3,4} Respect for leadership on the professional and other professionals are external stimuli that are not able to modify the intrinsic factors and does not influence its accession to the HH. Thus, professional behaviours are related to formal knowledge, but personal and ethical values of the individual is what will determine the adherence to HH as aseptic procedure essential to the quality of nursing care.^{7,10}

Nursing work occurs between hierarchical peers and superiors, and it is up to the nurse to know the feelings and conflicts in daily work to find solutions. Interpersonal and group relationships should be valued at work, because the membership is one of the basic reasons for the human and nursing to conduct much of the care with collective actions. The nurse and members the team must have attributes that favor the professional relationship to manage differences and respect individuals, as well as to pursuit the best practices as a consensus.^{4,7,8,12-4}

Interpersonal relationship was identified as the second leading cause of lack of motivation to work according to nursing professionals' opinion of a public hospital. Motivation is boosted by acknowledgment and appreciation (intrinsic factors), although external stimuli related to environmental conditions are equally important to maintain dissatisfaction at minimum levels.^{3,7,10,13}

Even lacking assured stability by being at period of trial at work, this does not influence adherence to HH. Safety at work (job stability) does not make people professionally happier, or motivated to work or to be effective.^{7,15}

Organizational policies represent rules and procedures that represent the values and beliefs of the company (organizational culture) and determine the strategies for investment in human resources. It is noteworthy that, centralization in decision-making and lack of participation for building consensus can result in alienation and dissatisfaction of workers. The nursing work is historically characterized by the Nightingale model with directive, autocratic and centralized leadership. Thus, when the nurse reproduces the classic principles of management (traditional) and there is no dialogue or valuing of people the result will be fragmentation of activities, impersonality,

centralization of power and strict hierarchy.^{4,15}

The nurse plays a key role in implementing policies and organizational guidelines, and for this, he/she must improve interpersonal skills in the carrying out of work, with appreciation of individuals and building a cooperative organizational environment, encouraging a review of practices and participation in educational activities.¹⁶

Participation in continued education activities must meet the learning needs of professionals and not the determination of leaders in order to provide the opportunity for continued personal development, attitude changes and creation of a satisfactory working environment, increased motivation, among others benefits. Personal and professional development should be established by the everyday experience of work.^{7,12}

The *status* determines the position of the individual within the organization and its recognition is related to intrinsic factors such as responsibility, professional accomplishment, creativity and challenging work, professional growth and relationship with the position. The existence of different professional categories in nursing determines the status of a hierarchical relationship, not always peaceful or less confrontational.^{3,4,17-8}

Hygienic factors such as role playing, interpersonal relations, communication and career development can lead to job satisfaction and personal fulfilment, but can also enhance the dissatisfaction depending on individual, situational and institutional characteristics for the development of work by professionals of the nursing staff in hospitals and other organizations such as administrative and teaching institutions.^{3,4,6,11-14,16}

Regarding the HH, the literature review of this study found no application of the Herzberg's two-factor theory.

Regarding the influence of motivational factors on the adherence to HH by the nursing staff, we have identified an interest in the job for 95 (70.4%) professionals, flexibility to prioritize care actions for 91 (67.4%), and autonomy for 76 (56.3%) and participation in decisions for 111 (82.2%) professionals, dimensioning aspects valued by these professionals in carrying out their work and increase their satisfaction.¹⁸

Strategies should be reconsidered and evaluated together (managers and professionals), with respect to viability, including expectations and professional and institutional needs. Matters relating to wages,

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social benefits and interpersonal relationships can consolidate internal and external partnerships, developing positive communication between peers and managers, increasing the productivity and welfare of professionals, making them protagonists in their everyday life and with more involvement and responsibility for carrying out the work with quality.

CONCLUSION

The study included 135 (100%) nursing professionals, 8 (5.9%) nursing assistants; 96 (71.1%) nursing technicians and 31 (22.9%) nurses; most worked in the hospital area for over a year, were predominantly female 101 (74.8%); with salaries between R\$ 1,001.00 and R\$ 3,000.00. Furthermore, 123 (91.1%) participants had received training on hand hygiene, prevention and control of hospital infection in the past two years and only 8 (5.9%) professionals were unable to correctly answer the five moments for hygiene hands, recommended by the World Health Organisation. Physical and environmental conditions of work do not bring satisfaction but their absence may cause great dissatisfaction to nurses. These conditions may influence the improvement of the quality of the work, but does not change and does not ensure adherence to HH practice. The hygienic factors salary, social benefits, interpersonal relationships, workplace conditions and institutional policies did not affect adherence to HH but generate job satisfaction. Despite hygiene factors operate independently from motivational factors, improved hygiene factors can contribute to the satisfaction of the nursing professional, what influences the improvement of the quality of work performed by them.

In order to improve adherence to HH, considering the hygiene factors addressed in this study, we recommend the participation of these professionals in defining the issues to be discussed during continued education activities offering greater opportunities for active participation in decisions regarding the activities of care, improved hierarchical relationships with professional acknowledgment and appreciation of the work done by the nursing staff. This is critical because it enhances the everyday experience of working, as well as represents a maintenance and encouraging strategy to the autonomy of each person involved.

REFERENCES

1. Mrigesh B, Susan R. A renewed focus on primary health care: revitalize or reframe? English/Portuguese

J Nurs UFPE on line., Recife, 10(2):600-7, Feb., 2016

Nursing adherence to hand hygiene according...

Globalization and Health [Internet]. 2010 [cited 2016 Jan 12];6(13):[about 5 p.]. Available from: <http://link.springer.com/article/10.1186%2F1744-8603-6-13#/page-1>

2. Ministério da Saúde (Brasil), Agência Nacional de Vigilância Sanitária. Segurança do paciente. Higienização das mãos. Brasília; Ministério da Saúde, 2013. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/seguranca_paciente_servicos_saude_higienizacao_maos.pdf

3. Sprandel LIS, Vaghetti HH. Valorização e motivação de enfermeiros na perspectiva da humanização do trabalho nos hospitais. Rev Eletr Enf [Internet]. 2012 [cited 2016 Jan 12]; 14(4):794-802. Available from: <http://www.revistas.ufg.br/index.php/fen/article/view/16100>

4. Guido LA, Linch GFC, Pithan LO, Umann J. Estresse, coping e estado de saúde entre enfermeiros hospitalares. Rev Esc Enferm USP [Internet]. 2011 [cited 2016 Jan 12];45(6):1434-9. Available from: <http://www.scielo.br/pdf/reeusp/v45n6/v45n6a22.pdf>

5. World Health Organization (WHO) [Internet]. The WHO agenda. Geneva; 2010 [cited 2016 Jan 12]. Available from: <http://www.who.int/about/agenda/en/index.html>.

6. Bezerra FD, Andrade MFC, Andrade JS, Vieira MJ, Pimentel D. Motivação da equipe e estratégias motivacionais adotadas pelo enfermeiro. Rev Bras Enferm [Internet]. 2010 Jan-Feb [cited 2016 Jan 12];63(1):33-7. Available from: <http://www.scielo.br/pdf/reben/v63n1/v63n1a06.pdf>

7. Bergamini, CW. Motivação nas organizações. 6th ed. São Paulo: Atlas; 2013.

8. Backes DS, Backes MS, Erdmann AL, Büscher A. O papel profissional do enfermeiro no Sistema Único de Saúde: da saúde comunitária à estratégia de saúde da família. Ciênc saúde coletiva [Internet]. 2012 [cited 2016 Jan 12];17(1):223-30. Available from: <http://www.scielo.br/pdf/csc/v17n1/a24v17n1.pdf>

9. Herzberg F, Mausner B, Snyderman, BB. The motivation to work. 2nd ed. New York: John Wiley; 1959.157p.

10. Herzberg F. Work and the nature of man. 4th. Ed. Cleveland; The Work Publishing Company; 1971. 203p.

11. Brandão IF, Lima LC de, Cabral ACA, Santos SM dos, Pessoa MNM. Satisfação no serviço público: um estudo na Superintendência Regional do Trabalho e

Giordani AT, Sonobe HM, Ezaias GM et al.

Nursing adherence to hand hygiene according...

Emprego no Ceará. REAd. Rev eletrôn adm [Internet]. 2014 [cited 2016 Jan 12];20(1):90-113. Available from:

<http://www.scielo.br/pdf/read/v20n1/a04v20n1.pdf>

12. Mathias HJA, Lara LF. Satisfação e motivação no trabalho em uma escola pública municipal de Irati, PR, sob uma perspectiva de aproximação entre a teoria dos dois fatores e a teoria da expectativa. UEPG Ci Hum, Ci Soc Apl, Ling., Letras e Artes [Internet]. 2011 [cited 2016 Jan 12];19(2):163-91. Available from:

<http://www.revistas2.uepg.br/index.php/humanas/article/view/3118/2964>

13. Chiavenato I. Gestão de pessoas. O novo papel dos recursos humanos nas organizações. 4th. ed. São Paulo: Manole; 2014.

14. Gugliotti ACS, Oliveira GB, Ribeiro CM, Almeida DE, Herculano LRM. Administração participativa como estímulo a motivação. Anuário da produção de iniciação científica discente. 2010 [cited 2016 Jan 12];13(17):289-98. Available from:

<http://saic.anhanguera.com/index.php/pp/article/view/920>

15. Carvalho JF, Martins EPT, Lúcio L, Papandréa PJ. Qualidade de vida no trabalho e fatores motivacionais dos colaboradores nas organizações. Educação em Foco [Internet]. 2013 [cited 2016 Jan 12];9(7):21-31. Available from:

http://unifia.edu.br/revista_eletronica/revistas/gestao_foco/artigos/ano2013/setembro/qualidade_motivacao.pdf

16. Gonçalves A, Mourão L. A expectativa em relação ao treinamento influencia o impacto das ações de capacitação? RAP [Internet]. 2011 [cited 2016 Jan 12];45(2):483-513. Available from:

<http://bibliotecadigital.fgv.br/ojs/index.php/rap/article/view/7001/5561>

17. Aulete Digital. Dicionário contemporâneo da língua portuguesa [CD ROM]. Lexikon Editora Digital Ltda; 2006.

18. Giordani AT, Sonobe HM, Ezaias GM, Valério M A, Andrade D. Adesão da equipe de enfermagem à higienização das mãos: fatores motivacionais. Rev Rene [Internet]. 2014 [cited 2016 Jan 12];15(4):559-68. Available from:

<http://www.revistarene.ufc.br/revista/index.php/revista/article/view/1567/pdf>

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