

The self-confrontation with own time as an analytical perspective in the study of relations between time and health

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Abstract *Sociological studies point out a malaise resulting from the use of time in contemporary societies. The present study aimed at developing a device that combines a quantitative instrument on the use of time, with a qualitative interview technique, seeking to reveal possible relations between time and health. A field research was conducted with nurses of a hospital in the metropolitan area of Rio de Janeiro. The subjects registered the length of time activities took to be carried out during an entire week in an activity notebook adapted from time use diaries. Interviews were inspired in self-confrontation, as workers observed a coloured image that describes time taken from the register of activities. The device allowed investigate how workers perceive this time and how they relate it to health, considered in an ample sense. Among the issues brought up by the group as source of discomfort and physical malaise, are the overcharge of professional work and acknowledgement of too much time for the others that are linked to too little time for oneself with a strong component in gender relations. The strength of this device as investigative path of relations of time and health indicates its adequacy in studies with other groups of workers.*

Key words *Management of time, Worker's health, Nurses*

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Introduction

Time is a primordial element in regulating life in society, since the civilization process imposes to individuals a higher number of activities whose chaining implies a higher dependency and complexity in the social relation network¹. The importance of time in social life permeates a cluster of sociological studies whose basic conception is that time spent in the various activities reveals sociocultural values of a certain group. The first sociocultural comparative study on the use of time, coordinated by Alexander Szalai in the 1960's, englobed data from 12 countries². In Brazil, Neuma Aguiar, is considered the pioneer in the systematic application of this methodology, when performing the research "Multiple temporalities of reference: analysis of the Uses of Time among domestic groups in the population of Belo Horizonte"³⁻⁵. Studies in the area are based on quizzes on time spent in specific activities or on *diaries of time use* for the register of time spent in all activities within 24 hours⁶⁻⁷.

Various countries have national data on the use of time, generating social and economic statistics that subsidize the formulation of indicators of living conditions⁸. European countries perform the survey HETUS (*Harmonised European Time Use Survey*) systematically, while the United States adopt ATUS (*American Time Use Survey*). In Latin America, placements are less elaborate, in general by information of time devoted to certain activities⁷. In Brazil, the Brazilian Institute of Geography and Statistics (IBGE) has computed, since the 1990's, time spent in domestic chores and the home-work commuting as part of the National Household Sample Survey, PNAD⁹.

The survey on the use of time is considered an unreplaceable tool in contemporary discussions on leisure, work schedules and the gender roles in large populations^{8,10}. However, not only the diaries but also the quizzes stick, exclusively to the measuring in hours and minutes, disregarding the qualitative experience of time^{11,12}. As for the relevance of this approach to identify tendencies of the use of time, there are limitations in the understanding of choices and/or underlying contingencies to the distribution of time, equally revealing of socially constructed values.

The demand for qualitative approaches of time becomes evident in the context of increasing temporal "challenges" in the interface of domestic and professional spheres, with the large quota of families where both partners work and the dis-

semination of jobs that extrapolate the 40 hours per week¹³. In addition, there is a framework of intensification and acceleration of work whose understanding demands approaches that can deal with the relations between time, work and subjectivity¹⁴. Consequences of the "shortage of time" refer to both, time quantified in hours and minutes, and to the way it is felt, since people need time to work, construct relations, exercise, take care, consume, finally, a group of actions fundamental to health. Thus, shortage of time and the so called *pressure of time* have been associated with symptoms of physical and mental illness¹⁵⁻¹⁶.

Departing from these reflexions, the present article has as an object of study the development of a device that seeks to promote a synergic meeting of the quantitative material on the use of time and the experience people have of time itself. The group investigated, nurses from a public hospital, frequently have more than one professional bond, which results in long weekly work hours^{17,18}. With the premise that time is an organizing dimension of life in society¹ and considering time as a "resource for health"¹⁶, we worked with the perspective that when expressing their time experience workers would bring up health issues.

Carried out in a public hospital in the city of Niteroi, RJ, Brazil, the study had as objective to develop and test a device that would allow nurses to analyse their own time, in order to reveal possible relations between time and health.

Methods – the development of the device and its use

Brief description of time use techniques

According to Ramos¹⁹, the first academic initiative in the area of the use of the time is a study on worker's free time, published by George Bevans in the beginning of XX century. The use of the time as an analytical tool gained relevance from an ample multinational study in years 1960², that demanded an effort of classifying activities, generating a basic system that guides the contemporary analyses of the use of time. Another multinational database, the *Multinational Time Budget Data Archive*, was described in 1990^{20,21}. In this context, the United Nations Statistics Division initiative, that proposed a system known as ICATUS (*International Classification of Activities for Time-Use Statistics*), as a way to prioritize the comparability between the different studies, is highlighted.

An important reference in this area in Brazil, is Neuma Aguiar, whose studies deal with various themes, such as the division and articulation of paid and domestic work²², the perception of time in everyday life³, the social unbalance relating travel time²³ and leisure and paid work time²⁴ including comparisons to North American cities⁵. This methodology was incorporated in official statistics by the pilot-project on daily use of time done by IBGE in 2009 in a sub-sample of the continuous PNAD²⁵.

Time-use diaries refer to the register of activities along one, two days or the whole week. Another modality of diary is based on the *following day interview*, in which time spent in activities of the previous day are verified. Some studies include contextual information and from the other people^{7,8}.

Empirical field and group studied

The device described in this study was developed in two phases, from a field research with nurses of a public hospital in Niteroi, RJ, Brazil, in 2012²⁶.

The device was applied to 42 nurses (24 female and 18 male) who participated in both research phases. The ones who had fulfilled the notebook correctly (1st step), that had more than one work contract, that occupied managerial positions, that had small children or elderly people in the family and those who were enlisted in graduate courses were prioritized for the second phase.

As for the sociodemographic profile, female nurses were younger (29% in the age group of 50 years or more, against more than half of male nurses in this age group). The majority of the group were characterized as married or with a stable union. As for the family, 54% of female nurses and 28% of male nurses had two children. Considering current values at that period, the majority of participants (61,9%) declared having a salary between 10 and 20 minimum wages. In the scope of work, a percentage higher than 80% had a specialist title; 62% of the group referred having two professional contracts, the higher percentage among men, where 90% referred to having two or three work contracts.

Device first phase: time-use

The tool used was based on an *activity notebook* developed by the authors²⁶, adapted from the *time-use diaries*¹⁹. The instrument contained

the following description of activities, whose grouping is based on a classifying elaborated by Aguiar⁷, from the ICATUS base: *Paid work, Leisure activities and social life, Studies, Self-care, Caring of others, Domestic activities, Commuting, Sleep and resting*²⁶.

The first version of the device was tested in 2011 with some professionals of the hospital, to promote fine-tunings that would make its use feasible for the objectives of this study. The final version of the activity notebook covered seven days of register, in which nurses marked the beginning and ending time of each activity in horizontal lines in a time chart referring to the 24 hours of day.

Nurses had been guided on the possibility of marking more than one activity which occurred at the same time, by registering more than one horizontal line, although without distinguishing between the main and the secondary activities, generally observed in studies in this subject^{19,27}.

The activity notebook included a short quiz with closed questions referring to sociodemographic data (age, income, and marital status) and professional activity (employment time at that institution, professional formation, number of nursing jobs and work schedule).

In the first contact with workers, the researcher presented the research objectives and the activity notebook, stressing the importance of their accession and inviting them to participate, after signing the consent form. The research was approved by the Hospital's Ethic Committee and by the National Public Health School Ethic Committee/Fiocruz, with all the recommendations on ethical aspects relative to research with human beings being respected.

Second stage of the device: the self-confrontation with own time

This stage began with a presentation of an image developed by the field researcher, with data taken from notebook registers. Called *time-table map*, the image described, with colours, all the distribution of activities during the entire week (Figures 1 & 2).

Possible fulfilling errors and absence of information were verified, being corrected when necessary. Having the image in the *notebook*, interviews began with a script of open questions about the timetable map. The dialogue began with a question about the interviewee's impression of that image, followed by questions about everyday events or events with family and hos-

pital activities. Thematic issues were also listed, such as the organization of own time, aspects of the public-private interface and the division of domestic work, with emphasis on gender relations and health.

Through this type of interview, it was sought to promote self-confrontation, a term derived from the Ergonomics of Activity, which refers to the confrontation of the distance between prescribed and real work²⁸. It is about giving visibility to the subjective mobilization that is necessary for the effective accomplishment of the work. We introduced this perspective of confronting the individual with himself in our study, in this case, from an external element (the timetable map), that would favour the confrontation related to the use of own time.

We proceeded the complete and literal transcription of interviews and, after that, to the analyses that began with the reading of narratives, trying to identify thematic categories and subsequently articulate them to the theoretical framework. We considered as source of analysis the nurse's narratives about the timetable maps, to understand how subjects perceived and related to their own time, focussing possible co-relations between uses of time and health, seeking to incorporate the context of discourse production²⁹. The treatment of empirical material respected the narrative integrity of interviews, seeking understand workers experiences on the time-use in daily life.

Analysis of results: the self-confrontation of nurses with their time

Reflections on the activity notebook and its fulfilling

To analyse the worker's vision on the fulfilling of the notebook is basic to assess the feasibility of using the device. The way people related to the device expresses a familiarity that seems to favour its fulfilling, allowing therefore, the preparation of the timetable map. From the workers point of view, fulfilling the notebook demanded them to reflect upon activities of daily life and of their borderlines, as e.g., related to self-care and care of others.

... when registering you keep asking yourself what self-care would mean...what would caring of others...in what moment these things meet... also, it's a moment you are...at this moment here [timetable map] I was taking care of my child...I

was taking care of myself...but of him too...but the most important impression is that it's an innovative research... Female nurse 56

Differentiated fulfilling strategies were observed, calling the attention for personal characteristics that are expressed by the way the device is used. For female nurse 54 *"... doing the exercise was cool...even because I remember well the things I do during the week...I have a good memory to do this..."*. However female nurse 25 relates to have fulfilled the notebook another way.

... whenever it was possible I fulfilled [the notebook] so I stopped at that present time, got my purse, went back and fulfilled it...so I did it that way...you could see I work all time so normally I would fulfil them during shifts... Female nurse 25

As it is inherent in human interactions, it is necessary to consider the expectations of the interviewees in relation to the participation in the research. In this sense, the fulfilling of activities in the notebook is subject to biases either over or under valuing time spent in certain activity, depending on what is socially desirable, as various authors point out²⁹. Among the observed expectations, is that there is a limit or a normality pattern in the division of time, which mixes with contradictions and ambiguities of daily life.

A difficulty pointed out by participants refers to classifying the activities. The description exemplified in the notebook at times might not have been enough to help the participant discern events corresponding to their activity. In addition, registration through broad categories (for example, household activities) and not by specific activity (washing, ironing, cooking, etc.) generated difficulties due to the impossibility of registering each activity itself.

The timetable maps as images of daily life - the first impression we never forget...

The timetable maps 1 and 2 (Figure 1- female and 2- male) are examples of nurse distribution of time. In Map 1 (female nurse 5) we can observe a great number of activities carried out in an overlapping way, occurring in short intervals of time. It is noticeable the large proportion of time occupied caring of others and with domestic activities. Sleep/rest is interrupted various times by care of others activities. There are moments of domestic activities done in a fractioned way, even during the working day that, as narrated by interviewees, are "management" of domestic sphere situations dealt with by phone. The possibility of notebook signalling of more than

one activity at the same time allowed to identify what we call *simultaneous activities*²⁶ such as, e.g., domestic activities and caring of others or leisure and caring of others.

In the set of maps, we were able to observe a considerable difference in the general aspect of the distribution of activities. In Map 2 (male nurse 4), for example, the image expresses a time that seems more continuous, more organized, and less fragmented and is seen as a “cleaner” map, different from the previous one that gives us a feeling of restraint of time. We can also perceive in this map a great difference in the quantity of time intended for leisure and for self-care. A more complete description of the timetable maps and comparison of quantitative data according to gender are presented in a more comprehensive research in which the present study is inserted²⁶.

Confrontation contributed to make daily experiences more visible, causing workers to show surprise with the distribution of their time by diverse reactions that translated an opportunity to self-analyse their time.

I'd never stopped to see *the time that I spend in the two jobs... the time that I spend with leisure... I was able to see that the share for studying is practically nil... that you are back and forth with two jobs, domestic activities, daily commitments...* Male nurse 64

The use of the timetable map in the interviews also seems to have promoted reflections about own existence generating questions and distress about the mechanically performed routine, the quality and balance of time spent in the different areas of life. On the other hand, this confrontation creates possibilities of changing habits by registering activities and visualizing the image of the time register itself.

... then I started to become worried... because I thought I was giving a lot of time for rest, that I could be using this time, at least until ten o'clock (P.M) to go to the movies or reading, so I started to change this from the notebook on. Female nurse 13

Looking at the map and being confronted with the use of time produced new meanings. This production was achieved during the interview itself, from the amazement toward something familiar, providing an awareness of the daily life facilitated by the map image. While defining the interview technique as “conversations with purpose”, Minayo³⁰ observes that these can be organized in various ways, among which, a *projective interview* that uses visual devices such as “an invitation for the interviewee to comment

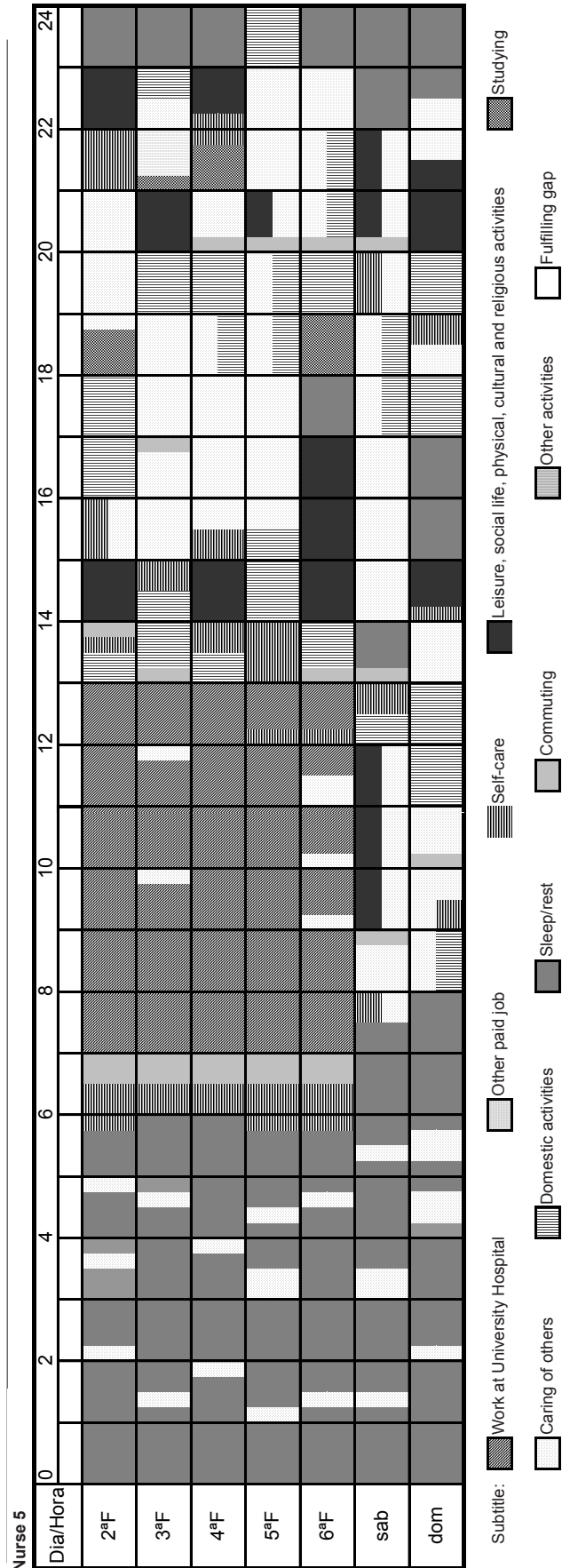


Figure 1 - Timetable map 1

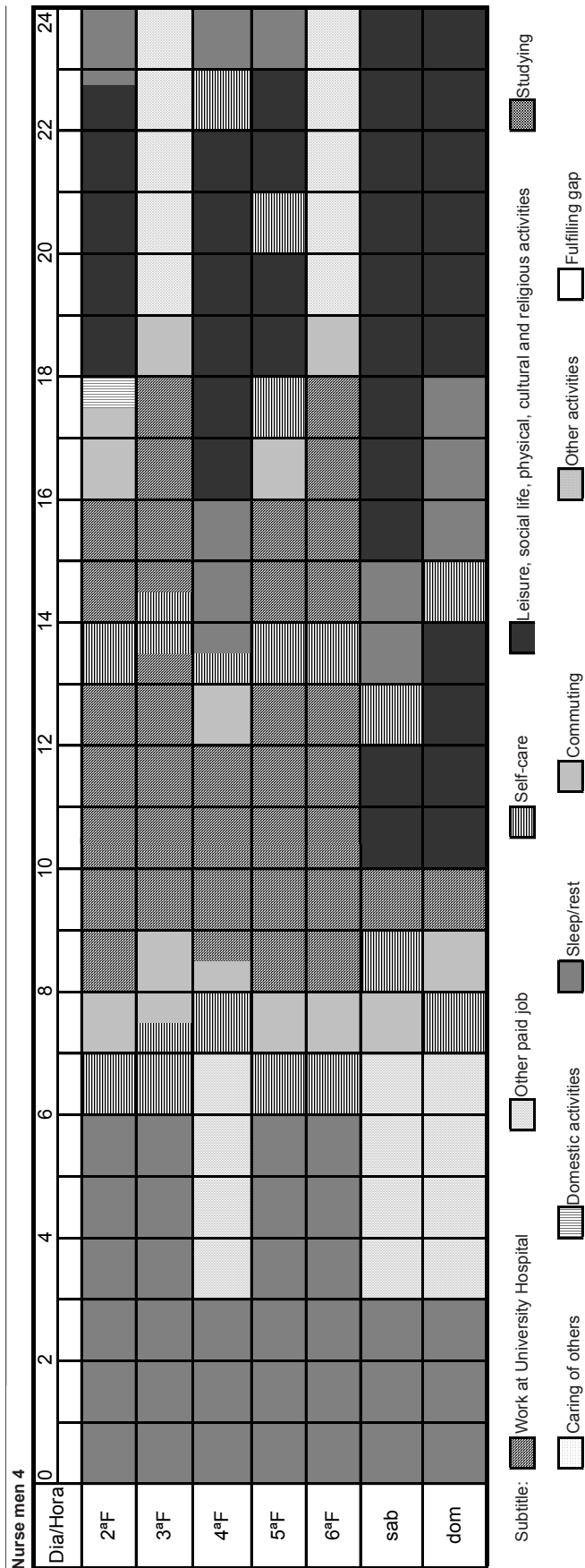


Figure 2 - Timetable map 2

on what (s)he sees”³⁰. In the present study, there is not a defined image in advance, but an image constructed along the research process itself from information given by the interviewee. From the methodological point of view, this *opportunity of seeing* life can be correlated to Duarte’s words²⁹, “When we conduct an interview, we act as mediators, so the subject can grasp his(her) own situation from another angle, we lead the other to turn on to (her)himself; we encourage (her)him to seek relations and to organize them”. Thus, to catalogue and analyse time lead interviewees to imprint a new look on their daily relations with other people and their own health.

In the narratives, mention is made of the excessive time devoted to work and its relation to health, as, for example, in female nurse 60’s speech, who perceives herself as ... *overwhelmed ... tired ... sometimes if I have many things to do I get nervous ...* The explicit mention to the body, articulated with the short time for oneself was identified in various narratives, contributing in a significant way to express how the lesser time for oneself tends to result in lesser possibilities of daily health negotiation. In this context, the female nurse 8 observes that you spend so long without going to a gynaecologist *and when you go there are surprises...I’m having to book an exam because a cyst has appeared...* And female nurse 18 highlights that ... *the body at a stage of life cries out... it might not complain while you she are young... it gets continuously overloaded and all that... but some time your body cries out and cries out loud...*

The relations between the time of work and the little time to take care of health expresses the finite character of time, as proposed by Stradzins et al.¹⁵. These authors observe physical and mental symptoms associated to the sensation of lack of time through mechanisms related to the insufficient recovery from work, reduction of the physical activity and care in relation to diet, as well as aspects related to stress.

In this respect, Dedecca and al.³¹ refer, from the reading of Elias¹, to the interdependence of the forms of appropriation of time available. The tension between times would result from the impossibility of modifying its daily extension, since the duration of the day - 24 hours - does not change. Thus, the increase of the length of one of the forms of appropriation of the daily time requires that at least one of the other be constrained³¹.

...As the days went by it was somewhat stressing... Why? Because I started observing that my

life has much more work... followed by taking care of others... and perhaps I would be letting go many... of my things... to do for the others... Female nurse 15

Domestic work, seen as successive and interminable, demands a substantial occupation of time, in which, for the most part, the overload is directed to women, in this in case nurses, generating a disproportion between time available for others and themselves. Everingham³² observes that female work in family is guided primarily to co-ordinate the multiple times, highlighting how much women anticipate the needs of family members, preparing and organizing the actions beforehand. The relation between time available to others and the little time for oneself is in many narratives that refer to an accumulation of wear and tear with implications to physical and emotional health.

Issues linked to time for oneself and to others expresses inequalities in the distribution of time associated to gender relations, especially toward constant demands of availability in the domestic space³³. In Brazil, this theme is addressed in the Longitudinal Study of Adult Health, ELSA – Brazil, whose analyses reveal that perception of insufficient time for self-care and leisure due to work and family demands is more frequent among those who have working time of over 40 hours a week (men and women). However, only among women, insufficient time was associated to health, in this case, to obesity³⁴. The author suggests that when assuming most or integrally the responsibility of care of others (children, spouse, elderly, handicapped, ill), women have less time for self-care³⁴.

But looking at (the map) it is different... so, now, I understand why I've been feeling so tired... I'm going to send this to my husband ... for him to understand... he keeps saying... my love, you are very tired... now I going to show him why... (silence) Interesting... Female nurse 5

In fact, invisibility of activities carried out in the domestic sphere and of care in a broader sense has been object of sociological studies, through discussions related to the concept of sexual division of labour^{35,36}. Care activities are among those that demand most dedication of time, with serious implications in the organization of daily life, as studies show in the Brazilian context²⁰ and in other countries^{37,38}. Gender differences in attachment to the domestic sphere and care lead women to experience their leisure as a time “invaded” by demands for care, in consonance with the previous speech³⁹. The lack of a *leisure moment alone*

is expressed in Timetable Map 2 itself, where leisure and care activities occurring simultaneously contribute to the fragmented aspect of this map. Among those who study free time, the degree of fragmentation of time is seen as indicator of the quality of this time, since domestic attributions affect the “free” character of this time. This is the principle underlying the concept of “poverty of time” used by different definitions in sociologic literature to express aspects of privation of time, including those resulting from gender relations³⁹.

In short, scarcity of time can be seen as a phenomenon produced socially, especially in the way activities linked to care are (un)valued and negotiated in society¹⁵. Care not only demands time, but as it includes activities strongly associated to needs of others, frequently has an unpostponable character, generating an important gender differential¹⁵. In this context, we highlight that simultaneous activities, more frequent among women, are frequently coupled to domestic activities, as shown in a previous study⁴⁰. These observations confirm those observed in an North American study with double-income couples, referring to multitasking, as described by the authors⁴¹.

What novelty does the device bring back?

The methodological sequence adopted, composed by the quantification of the uses of the time followed by the preparation of the timetable map, and later confrontation interview was adequate to the proposed objectives.

The empirical material presented indicates that reflexion on the map was potentialized by the interview, which on its turn was benefited by the image, that materialized something that, in a conventional interview, would only be verbal, that is, immaterial. Image visualization seems to have given concreteness to the experience of the time-use, possibly making the conflicts more easily identified by the workers themselves. However, the pure description of the time-use would not allow us to understand the meanings attributed by workers to the use of time and their relation to health, considering their context of life. From the point of view of the articulation between the two techniques that compose the device – recording of time and confrontation interview - it can be said that there was a synergetic movement, with a final result that surpasses the potential of each technique separately. In our view, the device's power is due to the fact that it has allowed a greater proximity of uses and experiences in relation to time beyond the visible and quantifiable, privileg-

ing subject's narratives and allowing them to reflect, constructing from language a speech for the production of meanings. So, although time-use diaries are disseminated in sociological studies⁸ and are even adapted to the area of shift work^{42,43}, in both cases the participants' performance is restricted to providing information on the use of time. Therefore, the device developed in the present study has an original character, by promoting workers to analysts of their own time and subjects capable of reflecting on time and health.

The device allowed us to understand the time-use among workers, their perceptions on the distribution of time and how they relate them to health, considered in a broad sense. Among the issues raised by the group are the overload of professional work and the finding of too much time dedicated to others, linked to the little time for themselves. From the workers perspective, the excess work is incompatible with time necessary to take care of oneself, which in turn would make them more vulnerable to disease. On the other hand, it is evident that it is not just an insufficient amount of time, since the excess of time dedicated to work alone is seen as a source of distress and mental suffering. Likewise, the experience of lack of time for oneself, mixed with little leisure time or fragmented leisure time, are linked to physical and mental fatigue possibly due to a lack of prioritization of oneself. Thus, the analysis undertaken brings elements that allow us to interpret that time acts as a resource for health, in the line proposed by Stradzins *et al.*¹⁴.

Study limitations and device new uses

From the point of view of the analyses carried out, we should consider that results cannot be generalized for workers of other occupations, having in mind the peculiarities of the nursing profession in what refers to long shifts (frequently 12 hours), the link to two or more jobs in Nursing, besides night work and work at weekends. Another specificity of the profession that may have influenced the results relates to the handling of medical records and organization of medication schedules which may have favoured the workers' familiarity with fulfilling the activity notebook. In addition, the observations made here should consider the criteria adopted in the selection of the group (inclusion those with higher weekly working hours, who held senior positions, who had small children or elderly in the family and who were in a graduate course) that possibly influenced the empirical material.

Also regarding limitations, some aspects deserve mention regarding the use of this device in new researches, especially with regard to the activity book. The instruments described in literature are diversified in terms of number of days, details of activities in categories and subcategories, in how to indicate simultaneous activities, in the inclusion of information about the context and people present in each activity^{7,27}. In the present study, we opted for an instrument lasting one week, since among nurses, the days on duty do not conform to the standard of five working days and two weekend days. Since the period was relatively long, the strategy chosen was to simplify the device the most, in order to facilitate completion. However, this simplification tends to increase an inescapable difficulty in time-use studies, which refers to the classification of activities (e.g., meals can be classified as self-care from a physiological perspective, but also as leisure, if performed in a restaurant, depending on the reason for the meeting). The use of broad categories of activities as housework (rather than "washing", "ironing", "cooking", etc.) can also be a source of difficulty during filling. It is essential that the development of the device consider group characteristics and objectives of the study in order to seek a more detailed or simplified device.

A positive point of the activity notebook was the possibility of reporting and analysing simultaneous activities, since there is criticism of the exclusive analysis of primary activities, as they do not consider time-maximization and care activities, sometimes classified as secondary in other studies¹⁹.

Final considerations

The material presented points to a powerful investigative path in the analysis of the relations between time and health. The use of the image on the use of time during the interview favoured a situation of estrangement that allowed us to approach the understanding on the relations workers establish between the way of using and experiencing time and their health.

The analysis revealed the centrality of the gender category in the values underlying the use of time, referring to the observation of Michelson and Crouse⁴⁴ that "the research on the use of the time inevitably involves the research on gender". Bessin and Gaudart⁴⁵ are more emphatic when affirming that "temporality lies at the basis of the gender system".

In a context of increasing temporal challenges - greater precariousness of work links, greater occupation of the 24 hours with consequent increase of the workday - the adaptation of this device for empirical use with other categories of workers is welcome. We also welcome initiatives to adapt this methodological path for use in groups in order to promote a discussion by workers on the relationships between time and health.

Collaborations

AV Pereira, SS Oliveira and L Rotenberg worked at all stages of the research, methodology, design and final writing of this article.

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References

1. Elias N. *Sobre o Tempo*. Rio de Janeiro: Jorge Zahar Ed.; 1998.
2. Szalai A. *The use of Time: Daily activities of urban and suburban population in the twelve countries*. Paris: The Hague, Mouton; 1972.
3. Souza MF. *A percepção do tempo na vida cotidiana sob a perspectiva de gênero: o dia-a-dia em Belo Horizonte* [tese]. Belo Horizonte: UFMG; 2007.
4. Cyrino R. *A construção social da temporalidade e a articulação entre trabalho doméstico e assalariado: o caso das mulheres executivas* [tese]. Belo Horizonte: UFMG; 2010.
5. Neubert FL. *Desigualdade ocupacional e o uso do tempo: um estudo sobre os determinantes do tempo de trabalho remunerado e do tempo livre entre indivíduos adultos inseridos no mercado de trabalho em uma cidade brasileira e nas regiões metropolitanas norte-americanas* [tese]. Belo Horizonte: UFMG; 2011.
6. Minnen J, Glorieux I, Pieter TT, Daniels S, Weenas D, Deyaert J, Bogaert VS, Rymenants S. Modular Online Time Use Survey (MOTUS) – Translating an existing method in the 21st century. *Electronic International Journal of Time Use Research* 2014; 11(1):73-93.
7. Aguiar NF. Metodologias para o levantamento do uso do tempo na vida cotidiana no Brasil. *Revista Econômica* 2010; 12(1):64-82.
8. Aguiar NF. Mudanças no uso do tempo na sociedade brasileira. *Política & Trabalho. Revista de Ciências Sociais* 2011; 34:73-106.
9. Bandeira L. Importância e motivações do Estado Brasileiro para pesquisas de uso do tempo no campo de gênero. *Revista Econômica* 2010; 12(1):47-63.
10. Chenu A, Lesnard L. Time Use Surveys: a Review of their Aims, Methods, and Results. *European Journal of Sociology* 2006; 47(3):335-359.

11. Morehead A. Synchronizing time for work and family: Preliminary insights from qualitative research with mothers. *Journal of Sociology* 2001; 37(4):355-369.
12. Carrasco C, Dominguez M. Measured time, perceived time: A gender bias. *Time & Society* 2015; 24(3):326-347.
13. Pronovost G. Le temps dans tous ses états: temps de travail, temps de loisir et temps pour la famille à l'aube du XXI siècle. *Enjeux publics IRPP - Policy Matters* 2007; 8(1):3-35.
14. Giannini EV. Tempo, trabalho e subjetividade – crises da atualidade. In: Ewald AP, Soares JC, Severiano MFV, Aquino CB, organizadores. *Tempo e Subjetividades – perspectivas plurais*. Rio de Janeiro: 7 Letras, Pequeno Gesto; 2013. p. 283-231.
15. Strazdins L, Griffin AL, Broom DH, Banwell C, Korda R, Dixon J, Paolucci F, Glover J. Time scarcity: another health inequality? *Environment and Planning* 2011; 43(3):545-559.
16. Strazdins L, Welsh J, Korda R, Broom D, Paolucci F. Not all hours are equal: could time be a social determinant of health? *Sociology of Health & Illness* 2015; 38(1):21-42.
17. Fernandes JC, Portela LF, Rotenberg L, Griep RH. Working hours and health behaviour among nurses at public hospitals. *Rev. Latino-Am. Enfermagem* 2013; 21(5):1104-1111.
18. Silva AA, Rotenberg L, Fischer FM. Jornadas de trabalho na enfermagem: entre necessidades individuais e condições de trabalho. *Rev Saude Publica* 2011; 45(6):1117-1126.
19. Ramos DP. Pesquisas de usos do tempo: um instrumento para aferir as desigualdades de gênero. *Estudos Feministas*. 2009; 17(3):861-870.
20. Gershuny J. *Changing Times: Work and Leisure in Postindustrial Society*. New York: Oxford University Press; 2003.
21. Bittman M, Wacjman J. The Rush Hour: The Character of Leisure Time and Gender Equity. *Social Forces* 2000; 79(1):165-189.
22. Aguiar NF, Suyama E. *A Divisão do Trabalho Remunerado e do Trabalho Doméstico entre Homens e Mulheres. Trabalho apresentado na Segunda Conferência Internacional de Uso do Tempo*. Rio de Janeiro: IBGE; 2010.
23. Mont'Alvao A. Transportes e tempo de mobilidade urbana em belo horizonte. *Política & Trabalho. Revista de Ciências Sociais* 2011; 34:127-144.
24. Neubert FL. Disposições Sociais e Usos do Tempo para Lazer. *Teoria e Cultura*. 2013; 8(2):103-113.
25. Soares C, Sabóia AL. *Tempo, trabalho e afazeres domésticos: um estudo com base nos dados da Pesquisa Nacional por Amostra de Domicílios de 2001 e 2005*. Rio de Janeiro: IBGE; 2007.
26. Pereira AV. *Os tempos e as relações de gênero: o cotidiano de enfermeiras e enfermeiros a partir do tempo de trabalho no hospital* [tese]. Rio de Janeiro: Fiocruz; 2013.
27. Stinson LL. Measuring how people spend their time: a time-use survey design. *Monthly Labor Review* 1999; Aug:12-19.
28. Vieira M, Faixa D. Quando os outros olham outros de si mesmo: reflexões metodológicas sobre a autoconfrontação cruzada. *Revista Polifonia* 2003; 7(7):27-65.
29. Duarte R. Entrevistas em pesquisas qualitativas. *Educar* 2004; 24:213-225.
30. Minayo MCS. *O Desafio do Conhecimento. Pesquisa Qualitativa em Saúde*. 11ª ed. São Paulo: Hucitec; 2008.
31. Dedecca CS, Ribeiro CSMF, Ishii FH. Gênero e jornada de trabalho: análise das relações entre mercado de trabalho e família. *Trab. Educ. Saúde* 2009; 7(1):65-90.
32. Everingham C. Engendering Time. Gender equity and discourses of workplace flexibility. *Time & Society* 2002; 11(2/3):335-351.
33. Cruz SA. O(s) trabalho(s) feminino(s): a omnipresença do trabalho doméstico e das responsabilidades familiares. *Cadernos de Ciências Sociais* 2003; 23:41-59.
34. Pinto KA. *Gênero e conflito entre trabalho e família: relação com a saúde física e mental de adultos no Brasil* [tese]. Salvador: UFBA; 2013.
35. Hirata H, Kergoat D. Novas Configurações da Divisão Sexual do Trabalho. *Cadernos de Pesquisa* 2007; 37(132):595-609.
36. Hirata H, Kergoat D. Divisão sexual do trabalho profissional e doméstico: Brasil, França, Japão. In: Costa AO, Sorj B, Bruschini C, Hirata H, organizadores. *Mercado de Trabalho e gênero: comparações internacionais*. Rio de Janeiro: Ed. FGV; 2008. p. 263-278.
37. Mattingly M, Bianchi S. Gender Differences in the Quantity and Quality of Free Time: The U.S. Experience. *Social Forces* 2003; 81(3):999-1030.
38. Budlender D. *Time Use Studies and Unpaid Care Work*. New York: Routledge/UNRISD Research in Gender and Development; 2010.
39. Chatzitheochari S, Arber S. Class, gender and time poverty: a time-use analysis of British workers' free time resources. *The British journal of sociology* 2012; 63(3):451-471.
40. Pereira AV. O cotidiano de enfermeiras e enfermeiros: relações de gênero, a partir do tempo no hospital. *Rev. Latino-Am. Enfermagem* 2015; 23(5):945-953.
41. Offer S, Schneider B. Revisiting the Gender Gap in Time-Use Patterns: Multitasking and Well-Being among Mothers and Fathers in Dual-Earner Families. *American Sociological Review* 2011; 76(6):809-833.
42. Knauth P, Kieswetter E, Ottman W, Karvonen M, Rutenfranz J. Time-budget studies of policemen in weekly or swiftly rotating shift systems. *Appl Erg* 1983; 14(4):247-252.
43. Fischer FM, Teixeira LR, Borges FNS, Gonçalves MBL, Ferreira RM. Percepção do sono: duração, qualidade e alerta em profissionais da área da enfermagem. *Cad Saude Publica* 2002; 18(5):1261-1269.
44. Michelson W, Crouse D. *Assessing changes in gender impact on behavioral priorities and patterns in everyday life*. International Association of Time Use Research, Conference, 2003. University of Toronto.
45. Bessin M, Gaudart C. Les temps sexués de l'activité : la temporalité au principe du genre? *Temporalités – Revue de Sciences Sociales et Humaines* 2009; 9. [acessado 2015 Maio 31]. Disponível em: <http://temporalites-revues.org/979>

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Errata

p. 2393

where it reads:

The self-confrontation with own time as an analytical perspective in the study of relations between teams and health

reads up:

The self-confrontation with own time as an analytical perspective in the study of relations between time and health