Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

RESOURCES FOR HEALTH MAINTENANCE IN PERSONS DEPRIVED OF LIBERTY WITH ARTERIAL HYPERTENSION: A SALUTOGENIC APPROACH

Marta Cossetin Costa[1]
Felismina Rosa Parreira Mendes[2,3]
Daiana Kloh Khalaf[1]
Vanessa Piccinin Paz[1]
Fernanda Moura D'Almeida Miranda[1]
Maria de Fátima Mantovani[1]

[1]Universidade Federal do Paraná, Programa de Pós-Graduação em Enfermagem. Curitiba, Paraná, Brasil.
[2]Universidade de Évora, Departamento de Enfermagem. Évora, Alentejo, Portugal.
[3]Universidade de Évora, Comprehensive Health Research Centre. Évora, Alentejo, Portugal.

ABSTRACT

Objective: to know the generalized resistance resources of people deprived of liberty with systemic arterial hypertension in a triple border region.
Method: a qualitative study based on the theoretical framework of Salutogenesis, in which 38 people deprived of liberty in Foz do Iguaçu, Paraná, Brazil, participated from February to July 2022. Guiding questions were used in the interviews which were submitted to thematic content analysis.
Results: 12 generalized resistance resources emerged in the reports of people deprived of liberty with systemic arterial hypertension: health team; access to medications; work; lifestyle habits: food, physical activity and restriction of access to drugs/cigarettes/alcoholic beverages; stress/anxiety control; reading and games; religiosity; family; self-care; cellmates; and employees.
Conclusion: people deprived of liberty with systemic arterial hypertension have generalized resistance resources to manage their life and health, which are related to personal care, the social group and the environment. It is noteworthy that once they are identified, the generalized resistance resources can be used by health professionals to manage SAH, other chronic diseases and aid in health promotion.

DESCRIPTORS: Systemic arterial hypertension. Persons deprived of liberty. Prisons. Salutogenesis. Sense of coherence.

HOW CITED: Costa MC, Mendes FRP, Khalaf DK, Paz VP, Miranda FMD, Mantovani MF. Resources for health maintenance in persons deprived of liberty with arterial hypertension: a salutogenic approach. Texto Contexto Enferm [Internet]. 2023 [cited YEAR MONTH DAY]; 32:e20230087. Available from: https://doi.org/10.1590/1980-265X-TCE-2023-0087en

RECURSOS PARA MANUTENÇÃO DA SAÚDE EM PESSOAS PRESAS COM HIPERTENSÃO ARTERIAL: UMA ABORDAGEM SALUTOGÊNICA

RESUMO

Objetivo: conhecer os recursos generalizados de resistência das pessoas privadas de liberdade com hipertensão arterial sistêmica de uma região de tríplice fronteira.
Método: pesquisa qualitativa pautada no referencial teórico da Salutogênese, da qual participaram 38 pessoas privadas de Liberdade de Foz do Iguaçu, Paraná, Brasil, no período de fevereiro a julho de 2022. Utilizou-se de questões norteadoras nas entrevistas, as quais foram submetidas a análise de conteúdo na modalidade temática.
Resultados: emergiram 12 recursos generalizados de resistência nos relatos das pessoas presas com hipertensão arterial sistêmica: equipe de saúde; acesso às medicações; trabalho; hábitos de vida: alimentação, atividade física e restrição ao acesso a drogas/cigarro/bebida alcóolica; controle do estresse/ansiedade; leitura e jogos; religiosidade; família; autocuidado; companheiros de cubículo e funcionários.
Conclusão: as pessoas privadas de liberdade com hipertensão arterial sistêmica apresentam recursos generalizados de resistência para manejar sua vida e saúde, os quais se relacionam ao cuidado pessoal, ao grupo social e ao ambiente. Destaca-se que, uma vez identificados, os recursos generalizados de resistência podem ser utilizados pelos profissionais de saúde no gerenciamento da HAS, outras doenças crônicas e promoção da saúde.

DESCRITORES: Hipertensão arterial sistêmica. Pessoas privadas de liberdade. Prisões. Salutogênese. Senso de coerência.

RECURSOS PARA EL MANTENIMIENTO DE LA SALUD EN PRISIONEROS CON HIPERTENSIÓN ARTERIAL: UN ENFOQUE SALUDGÉNICO

RESUMEN

Objetivo: conocer los recursos generalizados de resistencia de las personas privadas de libertad con hipertensión arterial sistémica en una región de la triple frontera.
Método: investigación cualitativa basada en el referencial teórico de la Salutogénesis, en la que participaron 38 personas privadas de libertad de Foz do Iguazú, Paraná, Brasil, de febrero a julio de 2022. Se utilizaron preguntas orientadoras en las entrevistas, que fueron sometidas al análisis de contenido en la modalidad temática.
Resultados: 12 recursos generalizados de resistencia surgieron en los relatos de detenidos con hipertensión arterial sistémica: equipo de salud; acceso a medicamentos; trabajar; hábitos de vida: alimentación, actividad física y restricción de acceso a drogas/cigarrillos/bebidas alcohólicas; control del estrés/ansiedad; lectura y juegos; religiosidad; familia; cuidados personales; compañeros de cubículo y empleados.
Conclusión: las personas privadas de libertad con hipertensión arterial sistémica poseen recursos generalizados de resistencia para el manejo de su vida y salud, los cuales están relacionados con el cuidado personal, el grupo social y el medio ambiente. Se destaca que, una vez identificados, los recursos generalizados de resistencia pueden ser utilizados por los profesionales de la salud en el manejo de la HAS, otras enfermedades crónicas y promoción de la salud.

DESCRIPTORES: Hipertensión arterial sistémica. Personas privadas de libertad. Prisiones. Salutogénesis. Sentido de coherencia.

INTRODUCTION

Prisons are a special scenario for primary healthcare, which must provide care equivalent to that provided to the general community[1], and their objectives relating to recovery, prevention and health promotion do not differ from those outside the prison. Thus, prison health teams should seek to minimize the negative effects of prison. There are chronic diseases among the health conditions recommended for care, such as Systemic Arterial Hypertension (SAH)[2].

It should be noted that SAH is a chronic, non-transmissible disease, considered the main preventable risk factor for cardiovascular and chronic kidney disease, accounting for 10 million deaths worldwide[3–4]. In the prison context in the United States of America (USA), it is estimated that 30.2% of Persons Deprived of Liberty (PDL) have a diagnosis of SAH; however, the prevalence of SAH for the same population in Brazil is unknown, even though the number of PDL continues to grow and such people age, which explains the relevance of understanding the disease and interventions in the prison setting[5].

The increased risk of SAH and death from cardiovascular disease are associated with incarceration, in addition to being the main cause of death for people with a history of liberty deprivation. The cardiovascular risk of PDL is medium to high when compared to the community, especially related to smoking and hypertension[6–7], although the mechanisms are not known. Thus, blood pressure control in this context is essential to avoid complications resulting from it[8]. Furthermore, Generalized Resistance Resources (GRRs) can also favor managing SAH in the prison context.

The GRR concept is one of the elements of the Salutogenic Theory which constitute any phenomenon that is effective in combating a wide variety of stressors; thus, they relate to the ability of a person or a collective to deal with tension, and to avoid and manage stress. Therefore, they provide the human being with a set of consistent life experiences, either through the individual's participation in the action or through the possibility of taking stock of their own life and health. GRRs facilitate people's perception of their lives as consistent, structured and understandable[9–10].

In this sense, it is evident that the Salutogenic Theory, elaborated by Aaron Antonovsky (1923-1994) in the 1970s, was defined as an overall orientation to see the world, since the way people see their lives has a positive influence about their health. The central question of this model is to understand how and why certain people remain well even after experiencing situations of intense stress, and others do not. The focus is on the origin of health: illness or health depend on the proper management of tension[11].

The resources to be mobilized for managing tension may be linked to the individual, the social group and the environment, and may be internal or external. They consist of material resources (money, food, housing), knowledge and intelligence, self-knowledge, a rational and flexible coping strategy, social support, cohesion and commitment to their culture, religion and philosophy, healthy behaviors, current health status, as well as genetic and constitutional characteristics[9–10,12].

The presence of such GRRs improves an individual's chances of dealing with life's challenges, helping to build coherent life experiences. Therefore, they are related to the individual's ability to manage tension and avoid or manage stress; in addition, it comes from lived experiences. However, the key factor is not just their availability, but the individual's ability to use them[9,12]. Nevertheless, it is considered that the absence of GRRs can also become a stressor, called Generalized Resistance Deficit (GRD)[13].

The salutogenic paradigm is not linked to the construction of a perfect health condition or a perfect world, but a way of living with the health potential that each person has, and at the same time

working to improve it. Thus, a perfect state of health is not expected, but it is understood that it is a natural condition of human beings to fight chaos in everyday life, managing stressors in a healthy way[14].

The salutogenic approach is particularly appropriate for health promotion, as it explores the health source rather than disease and risk factors. It is therefore consistent with a positive vision of physical and mental health, quality of life and well-being. In view of this, health professionals can help people to identify, mobilize and use the GRRs available for managing their health[1,12,15,16,17,18].

It is necessary to overcome healthcare with a pathogenic focus in the prison context, expanding it to a positive, salutogenic view of health in order to constitute a health-promoting space and to provide PDL with better health and well-being conditions, considering pre-detention marginalization and commitment to social justice. To this end, identifying the GRRs used by PDL to stay well despite imprisonment and illness, and how the actions of the health sector can help them to mobilize and use such GRRs and in turn enable better living conditions and health is essential[19].

In this sense, it is emphasized that the GRRs were not fully explored in this context; however, certain factors can lead PDL to maintain a positive attitude towards their life and health, contributing to their well-being, despite the physical, psychological, social and material impacts that prison can incur on them[20], which justifies this study. Thus, the objective is to know the GRRs from the reports of PDL with SAH from a triple border region in Brazil.

METHOD

This is a qualitative, descriptive and exploratory study anchored in the theoretical framework of Salutogenesis. This approach aims to capture relationships, visions and judgments of people in facing the intervention in which they participate[21]. Thus, the study was conducted between the months of February and July 2022, in a prison unit in Foz do Iguaçu, a large municipality with a triple border in the southern region of Brazil, located in the extreme west of Paraná. This unit holds male persons aged over 18 years. The sample used was by convenience, with the sampling plan including the totality of PDL diagnosed with SAH in the unit and who agreed to participate in the study. The first contact with the participants took place in 2021, when the study and its objectives were disclosed through folders and verbally.

The first author, who is a nurse in the prison health team, met face-to-face and individually with the participants who met the inclusion criteria in the office of the penal unit; these criteria included being a PDL in the unit and having a diagnosis of SAH. The participants were informed about the study objectives, its usefulness and procedure. Only PDL who agreed to be part of the study sample and signed the Informed Consent Form (ICF), which informed the research objectives and ensured the participant's anonymity, participated in the study. It should be noted that the exclusion criteria were: being self-declared illiterate; and discontinuity: request in writing or verbally to withdraw from the study. It is pointed out that only one approached PDL refused to participate in the study.

The interviews were conducted in the office of the health clinic of the penal unit. The interview consisted of guiding questions regarding healthcare before and in prison, about what factors they considered which helped or hindered health maintenance in the prison context, and also how they maintained their health, their future perspectives and a description of their routine in the unit. The average duration of these interviews was 16.2 minutes (±8.3).

Participants' names were replaced by identifying codes: P (participant), M (male) (sex) and X (Arabic number in ascending order of interviewed participants). Example: PM_1. In the case of officials from the penal system who were mentioned in the interviews, Arabic numerals were used in sequence.

The interviews were audio-recorded and transcribed, initially using the Transkriptor tool, and later checked and organized by the researcher. Next, the data were arranged in an Excel spreadsheet, in which the lines corresponded to the participants and the columns to the answers obtained in the open questions. This spreadsheet was imported into the NVivo Program (version 12 – release 1.7 for Windows), which was used to store, organize and analyze the data, with subsequent content analysis in the thematic modality following these steps: comprehensive and exhaustive reading, exploration of the material; and data treatment and interpretation[22–23], initially coded by the first author, with review and discussion by the research team. The study was approved by the Human Research Ethics Committee of the Health Sciences Sector at the Federal University of Paraná.

RESULTS

The qualitative research sample consisted of 38 male PDL diagnosed with SAH; mean age of 40.5 years (±9.4); predominantly married; 60.5% parents of 1 to 3 children; 71.1% with less than 12 years of formal schooling; and the interviews lasted an average of 16.2 minutes (±8.3).

The total coding of the corpus resulted in four categories and/or codes, and in this study, the following analysis category and subcategory were considered: GRRs – factors which help maintain health in prison. An attempt was made to list the GRRs involved in the prison environment; therefore, the language used was similar to that of the participants, naming them as factors which help maintain health in prison at the time of the interviews. Chart 1 presents the category and subcategory.

Chart 1 – Analysis category and subcategory. Foz do Iguaçu, PR, Brazil, 2023.

Category	Subcategory
GRRs and GRDs	Factors which help maintain health in prison; Factors which hinder health maintenance in prison
Health, well-being and quality of life in prison	Prison healthcare concept; Prison quality of life concept
(Hopelessness) hopes for life and the future	Hopes for the future and life; Hopelessness about the future and perception of life
(Non-) healthcare	The search for health maintenance before imprisonment; The quest to maintain health in prison; Health information sources; (Mis) Information

Legend: GRRs = Generalized Resistance Resources; GRDs = Generalized Resistance Deficits.

There were 93 references coded in the subcategory, a percentage of 13.5% of the total corpus of interviews, from which 12 GRRs or factors that help maintain health in prison emerged, namely: the health team; access to medications; the work; lifestyle habits: food, physical activity and restriction of access to drugs/cigarettes/alcoholic beverages; stress/anxiety control; reading and games; religiosity; the family; self-care; cellmates; and the employees. Next, excerpts and analyzes of each GRRs are presented below:

The health team

The prison health team and the care they provide are presented as an important element in maintaining health by the participants; also, health professionals are a reference to the care of PDL, with nurses and doctors cited among them as being relevant in the care process. PM_14 even relates care to living.

What helps me is the nurse, the nurses who help me and the doctor who comes here to the unit who is always there, right? Giving me direction, and that is who brings me weekly, measures my

pressure, takes care of me, the nurses or the doctor who prescribes me the medicine who gives me the medicine, in fact, I need the medicine he gives me, the medicine for me to take, because without the medicine it would be worse. Today, I, today, I couldn't if it weren't for the nurses in the system or the doctor, today, the medicine they give me, I couldn't even... Right? Because of a disease that I have, I couldn't even be here because, in fact, and the nurses and the doctor are concerned about our health, if they weren't concerned they wouldn't send medicine and they wouldn't be there with us, got it? (PM_17).

What helps me to maintain my health is the care I have here at the unit itself, which is the issue of measuring blood pressure, knowing how I am and the medication I take. The only thing I have is related to the service I have (PM_32).

Access to medications

Access to medications in the context of the prison unit was presented by the participants as an element which contributes to maintaining their health, especially when using them in correct doses and times. It should be noted that all PDL participants in the interviews used drug treatment for SAH.

I try to keep taking the right medicine on the right days, taking the medicine in the right dosage too, because that time, I even told you, that I was taking two in the day, that I was heavily attacked (by symptoms)*, and then now it's calmer* (PM_18).

Medication is one of the main points, because I can't maintain my blood pressure without medication, right? Unfortunately, it always goes up, I can even exercise and, especially when I exercise, it always goes up a little, right? It's a set. So medication is essential. I can't miss it. Thank God there is no shortage of medication, there is no shortage (PM_29).

The work

Work was presented by the PDL as an important element in maintaining their health, as it allows them to occupy time, perform physical activity, establish the perception of being useful and interact with other people and implement a routine. It is illustrated by the following reports.

What helps me is the work I do, [...] *it's a job I already liked doing when I was on the street and now I love it even more. I work in the garden, growing vegetables and I love it because it's very nice: you see the little plants growing and you know you're going to eat them, and that's very good, and we see that there's life, that God is giving life* (PM_2).

Now I got a job, it has helped me, of course, for sure, for sure, it takes up time, the day ends up being short. [...] *The kitchen is semi-open, I stayed there in Colonia for a year and four months, in the kitchen, you just can't go outside, but it's there, I feel air, I feel it, you don't, you don't even feel imprisoned, honestly speaking* (PM_26).

Life habits: food, physical activity and restriction of access to drugs/cigarettes/ alcoholic beverages

To some extent, prison is presented by the PDL as a facilitator for quitting cigarette, alcohol and drug consumption, since it restricts their entry, a situation which would facilitate quitting these vices for the PDL. Even more, in the same context there is a restriction of food, since the menu is programmed by a professional nutritionist and has a greater probability of meeting healthy recommendations. The possibility of performing physical activities on the sunny patio and even in the cell were also described by the PDL as facilitators for maintaining health.

The restriction of food, which there is much more on the street, right? Restriction in many, many ways, even a drug, a cigarette, a drink, parties, is the restriction we have here. So, I believe it preserves our health a little, right? In a way, whether you want it or not, it doesn't exist, it doesn't exist in here, there's nothing here. So, one way or another, whether you like it or not, you will preserve your health (PM_12).

Things that help to maintain health, to maintain it, I think it is to go back to doing physical activity again and, and to start having re-education again, to eat well again (PM_16).

Stress/anxiety control

Participants described that seeking to control stress and anxiety in prison is essential to stay healthy, using strategies such as reading and peaceful living in their cell to do so.

So, I try to avoid anxiety, you know? So much so that I learned some methods of when I'm anxious, I'll try to control it, you know? I look for, like, silence, I take it, I lie on the bed, that's it, I close my eyes, you know? And I try to keep as still as possible, it works for me. Pass that over there, because inside the cell you are anxious, it generates stress, it generates it, and it is not good. Yeah, it's a way for me to calm down, I think, you know? I learned to read, that too, I learned to read. And the reading (PM_10).

I know that if you stay calmer, because the place is conducive to nervousness, right? [...] *My psychology is calmer. I keep control* (PM_18).

Reading and games

Reading and games were described by the participants as supports to keep themselves well in prison, as they allow an abstraction of reality, with an emphasis on reading.

Pass that over there, because inside the cell you are anxious, it generates stress, it generates, and it is not good. Yeah, it's a way for me to calm down, I think, you know? I learned to read, that too, I learned to read. And the reading (PM_10).

Yeah, a handicraft, reading a book, like that, that's all (PM_22).

Religiosity

Participants PM_4 and PM_29 use faith, bible reading and prayers as strengthening mechanisms.

It is, for example, inside the cells to take care not to experience too much stress, nervousness, these things, take a reading, a bible, a holy bible, then it keeps me calmer. Yes, it has been a support (PM_4).

I, at the moment, my health, I'm trying to balance my weight, putting my head in place and evaluating some attitudes and I'm firm, with faith, faith in God, right? We have to get attached to God, right? Mainly, otherwise... That makes me stronger. I'm, I'm evolving, thank God I'm evolving (PM_29).

Family

The presence of family members and their stimuli is important for maintaining health, according to participants PM_7 and PM_8, as it strengthens them to stay well and for self-care.

My family helps to maintain health. [...] *I want to leave well to take care of them. Yes, it has been my support* (PM_7).

In fact, when I, when I married my wife that I have today, I changed my rhythm of eating, she's on top of me, monitoring me, right? Like I told you, that I was one hundred and something, one hundred and twenty-eight kilos. In fact, there was even a little more, and from then on, when I met her, I started to change the way I eat, less oil, less salt and eating at the right times (PM_8).

Self-care

Self-care, through self-management of their illness, was described by the participants as a contributing source to staying healthy; as well as determination, through careful eating, physical activity, distractions and the desire to be free.

What is helping me is the will of myself, myself, right? That I have to be willing to keep my health better (PM_19).

I've only been helping myself, I'm going to tell you the truth, distracting myself with a game of chess, it's the only thing that has kept me, kept me healthy and the will to go away, win again there in the street, there (PM_26).

Cellmates

Cellmates were presented by the participants as support for maintaining health, as they help each other with the knowledge they have and for distraction through conversations.

The people who are with me, I always ask for help and they always help me, always, always one will help the other (PM_17).

My cellmate, he can annoy me a lot, make me very angry or even a comment, why don't you get angry with the guard? So, the guard isn't bothering me here, I live with you, I'm living with you. So, it's us, we have to get it right, otherwise the guard comes there, does what he has to do and goes there. And we have to continue there, day by day. Exactly, they can support or stress you (PM_26).

Employees

The security team employees were also described by the PDL, PM_13 and PM_23, as providing support in maintaining their health, through conversations that they consider therapeutic and health guidance.

There are some employees, your 1 is a very good guy, your 2, a very nice guy too, if you need something, he always gives us attention, treats us like a human (PM_23).

The prison routine

The participants' reports show that the daily routine starts early in the unit: for those who are in the galleries between 05 and 06 am when coffee is served; and those involved in work activities when the work routine starts, according to the sector, between 4 am and 6 am. Afterwards, they are submitted to the counting process (conference by the security team of all the PDLs by names, a kind of role call, carried out at 07:00 and 19:00).

Afterwards, for some participants, the routine is linked to work, study, personal hygiene activities, food and physical exercises (PM_1, PM_5, PM_7, PM_8, PM_9). Those who are not involved in work or study, perform activities such as: physical exercises in the sunny patio (about 1 hour) and in the cell, reading the bible or books, playing games, cleaning the cell, talking to cellmates. However, idleness/absence of activities prevails for the second group of PDL (PM_3, PM_4).

It's more work and food activities. We wake up at five in the morning in the kitchen, right? And then we go until about six hours there. [...] *it has intervals. Yes, rest. Not leisure. There is, there is a television* (PM_8).

It's routine. You wake up, have breakfast, then go to the patio, walk around the patio a bit, play football, come back, take a shower and go back to the shack, then it's just sitting, lying down, watching television. So, that's it, that's the routine. That. No, I work in crafts, I'm doing that. I don't study. I do the book review, but it's once a month, then. There are no other things, that's it. Lots of idle time. Very anxious (PM_27).

DISCUSSION

The limited number of resources captured from the reports of PDL diagnosed with SAH makes the difficulty in maintaining health in prison explicit; however, it is emphasized that it is not just the amount of resources that delimits health, but the ability to identify and mobilize them[9], and that they can be related to any characteristics of the person, group or environment that favor management of stressors[13].

It is necessary to consider that the possibility of a person managing any situation regardless of what is happening in their life, and likewise the ability to resist in the prison context depends on their health and well-being[20]. What is captured in the participants' reports is the quest to manage their lives, despite the difficulties imposed by prison and the disease/SAH.

The factors which help in maintaining the health of the most cited PDL participants were the support of the prison health team and access to medication, which differs from the findings of a study with Swiss PDL which demonstrated a lack of confidence, inefficiency of prison medical services and punishment for refusing medication as factors that prevented them from seeking the health service[24].

The PDL in the Swiss study were concerned about going to the healthcare service, since it could cause them: accusations of simulating a clinical condition (of being "fakes"); negative financial consequences (such as being taken out of work); isolation of diseased PDL[24]. Only one participant in our sample reported that the medical professional had similar coercive behavior to security professionals, and a similar argument was not verified in the other reports.

In the same perspective,35 PDL from the United Kingdom stated that health professionals were not concerned with their health and well-being[25]. In the opposite direction, a participant in our sample showed that the nurses in the prison system were his support for adherence to SAH therapy.

In this perspective, it is pointed out that although adherence to treatment is configured as an individual practice, it can be influenced by the collective, such as by nursing and its actions. Thus, nurses can work with the person, jointly and participatorily managing the disease and its complications and setting goals[26]. Therefore, the present GRRs can be used as strengthening points and auxiliary measures in the care process; in addition, the bond between nurse and patient can be configured as a GRRs insofar as it favors therapeutic planning and its follow-up.

The perception of the participants in relation to the employees of the security team in our study was paradoxical, since they were described both as facilitators and obstacles to access the health service; therefore, there is a relationship between the team and PDL which can sometimes be a GRR, or sometimes a GRD, since they are responsible for the decision on displacing imprisoned people for healthcare. It should also be noted that the focus of the prison is custody and security, with limited mobilization of PDL and professionals, to the detriment of the health needs of the prisoners, which is configured as a field of tension and continuous struggle to balance both aspects[27].

In our study, relationships with family members were factors that influenced health, being positive for those who maintained their bonds. Social relationships, especially with the family, are closely related to the conception of being healthy for the PDL, as well as the relationships between prisoners and professionals which can generate health, especially mental and emotional[28–29]. Contact with the family is central to the values of PDLs as it restores personal dignity, positively impacting their rehabilitation and reintegration into society, including the potential to prevent recidivism[30], for which we see was pointed out in our sample as GRRs for those who had ties with their families, and the perception of the future was also more positive.

According to the reports presented by the PDL, daily life in prison presents a well-established and structured routine, as evidenced in the reports regarding the day-to-day progress. However, it is necessary to consider that the prison routine is a paradox, in that it can be monotonous and harmful; and/or favor well-being and mental health to the extent that PDL can feel some control over their lives[20].

Access to regular physical activities is important to maintain and improve the health of prisoners, which was evidenced in our study. The PDL in our sample have about 40-60 minutes a day to perform physical exercises and considered them beneficial to their health, as well as aesthetic changes in the prison and adequate spaces for receiving visitors[20].

The aforementioned Swiss study used Yoga as a form of physical activity with 152 PDL, and found improved levels of anxiety, less fear of losing autonomy, memory problems, improved decision-making, concentration, less obsessive thinking and body dysfunction. Users who were submitted to other physical activities of free choice, not Yoga, also improved their suffering. Thus, they concluded that physical activities reduce psychological and psychiatric suffering, anxiety and depression in PDL, whether Yoga or another physical activity modality[31].

Food in the penal unit targeted by the study is planned by a nutritionist, which would theoretically facilitate the maintenance of an adequate diet. In a study with 25 PDL from the state of Rio de Janeiro, Brazil, a poor evaluation of food in prisons in that context was evidenced, as it was repetitive, of low quality, with industrialized and unhealthy products. In this referenced study there was a report of tasteless, spoiled food, with impurities and insects, as well as periods of hunger[32]. Obesity rates of 13.2% were found in another study with 205 Spanish PDL, which was related to overeating and abuse of unhealthy foods[33].

Adequate food is a health condition which must comply with hygiene and diet standards controlled by a nutritionist whose nutritional value must be sufficient to maintain the health and physical vigor of PDL[34]. However, despite the legal provision for regulating the right to food, it seems to us that they were not sufficient for implementing public policies for access to food in prisons.

It is necessary to consider that coping resources, their availability and use are perceived differently among people; thus, even when confronted with stressful factors, some people demonstrate the ability to control, handle, and manage tension and stress, while others do not[9]. Thus, it is not only necessary to know the stressors, but also to understand how individuals, especially those who are in vulnerable conditions such as PDL and whose resources are scarce, manage tension and combat stressors.

It is considered that marginalization of PDL access to health is prior to the deprivation of liberty, which is related to social vulnerability, health problems (chronic untreated diseases and mental illnesses), high consumption of illicit drugs and alcohol, situations maintained and deepen with the restricted access to prison health services, as well as the unhealthy conditions of the units[35]. In a study with PDL, penitentiary agents and health professionals from a male prison unit in Minas Gerais, Brazil, it was revealed that the three categories perceive the right to health as a norm which does not materialize in the daily life of PDL[36].

It should be noted that the burden of untreated diseases in the prison context will return to the community when the PDL are released, just as access to health is related to social justice. Therefore, it is necessary that the process of returning to society be thought out and planned from the moment they enter the prison context, and so they need to be working with the factors that can help such people when they return to the community.

Furthermore, a health promoting action which can be pointed out is one described in a systematic review about the effectiveness of assisted therapy with dogs, which shows that it can be an important action to improve the following aspects of prisoners of both sexes[37]: health, emotional control, academic skills, anxiety, stress, recidivism, social role, empathy, and self-control.

Another example is the care farm for adult offenders analyzed in a study carried out in England with 7 PDL, one ex-PDL, 5 prison system employees and 6 farmers, which seems to help in personal growth through meaningful, motivating and stimulating activities, as well as calming interactions, including building new skills and confidence[38].

Resource mobilization can end up with stressors: avoiding, defined as non-stressors, managed/overcome, leading to tension that is successfully managed and increasing sense of coherence, or leading to unsuccessful management, tension. It is these results that impact the movement of the person in the health-disease continuum. The focus is on a broader system in the context of people's lives, the resources they have to achieve health and which enable them to acquire skills and abilities to access them[20].

Thinking about health in prison implies not only reflecting on the health of the PDL, but on the healthy or unhealthy prison context; health is created through the GRRs which can include: structural, environmental, social and economic; and produce consistency, structure and meaning in people's lives (such as: money, knowledge, experience, self-esteem, healthy behavior, commitment, social support, cultural capital, intelligence, traditions and vision of life). However, prison health is still commonly understood through the biomedical model, the prevention and control of diseases in PDL, the person, to the detriment of a health-promoting perspective aligned with the salutogenic paradigm, which considers the social, economic and environmental context of health and disease that surround the subjects, the prison environment and society in general[20].

Thus, a "healthy or unhealthy prison" refers to both the prison structure and the experiences lived, as well as the health of the PDL themselves. It constitutes an arm of public health which aims to produce health and work with the social determinants of health to create environments which can result in better conditions for both life and health, acting to enable people to control their health and access social and structural resources to do so[20].

Given the above, it is noteworthy that the notion of "healthy prison" remains a paradox without implementation of significant reforms in administration and in the way prisoners are treated. It is considered that incarceration itself is harmful to health, since the statistics of lower mortality rates in prison do not capture the experiences lived there. Public health in prisons needs to challenge social and structural determinants, not being limited to individual actions to promote healthier lifestyles[24], and although individual actions can bring specific results, the change needs to be broader.

The study limitations are related to the convenience sampling, which may not portray other PDL groups, and the fact that a researcher is a member of the prison health team, although there was awareness and agreement by the PDL.

CONCLUSION

There were 12 GRRs or factors which help maintain health in prison reported by the PDL: the health team; access to medications; the work; lifestyle habits: food, physical activity and restriction of access to drugs/cigarettes/alcoholic beverages; stress/anxiety control; reading and games; religiosity; the family; self-care; cellmates; and the employees. Of these, the health team and access to medications really stood out in the reports.

In this sense, the GRRs were related to the individual (self-care, life habits); to the social group (family, other prisoners, penal system and health officials); and to the environment (prison structures and routines). In addition, although not very numerous, since they were identified by the PDL, they can be used by health professionals in managing the health condition of these people, and particularly in health promotion actions and in management of the disease/SAH.

Given the evidence that PDL have limited access to GRRs in prison to manage their lives and health, the need for public policies to make prison environments healthy is visible, in which changes need to involve the context of the entire penal institution and the social vision of prison. To this end, favoring access to qualified health services, housing, clothing, food, work, leisure, and social relationships are fundamental to guarantee human rights to PDLs and to enhance access to GRRs.

The professional nurse in this scenario needs to advocate the need for broad changes in the organizational and structural contexts of prisons, in which the health of PDL is central, to the detriment of safety regulations.

REFERENCES

1. Schultz ALV, Dotta RM, Stock BS, Dias MTG. Limites e desafios para o acesso das mulheres privadas de liberdade e egressas do sistema prisional nas Redes de Atenção à Saúde. Physis [Internet]. 2020 [cited 2023 Jun 15];30(3):1-19. Available from: https://doi.org/10.1590/S0103-73312020300325
2. Wang EA, Pletcher M, Lin F, Vittinghoff E, Kertesz SG, Kiefe CI, et al. Incarceration, Incident Hypertension, and Access to Healthcare: Findings from the Coronary Artery Risk Development In youngs Adults (CARDIA) Study. Arch Intern Med [Internet]. 2009 [cited 2022 Apr 21];169(7):687-93. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2829673/
3. Caetano GM, Daniel ACQG, Costa BCP, Veiga EV. Elaboration and validation of an educational video on blood pressure measurement in screening programs. Texto Contexto Enferm [Internet]. 2021 [cited 2023 Jun 15];30:e20200237. Available from: https://doi.org/10.1590/1980-265X-TCE-2020-0237
4. Mills KT, Stefanescu A, He J. The global epidemiology of hypertension. Nat Ver Nephrol [Internet]. 2020 [cited 2023 Jun 15];16(4):223-37. Available from: https://doi.org/10.1038/s41581-019-0244-2
5. Silva PN, Kendall C, Silva AZ da, Mota RMS, Araújo LF, Pires Neto R da J, et al. Hipertensão em mulheres presas no Brasil: muito além do biológico. Ciênc Saúde Coletiva [Internet]. 2023 [cited 2023 Jun 15];28(1):37-48. Available from: https://doi.org/10.1590/1413-81232023281.10672022
6. Wang EA, Redmond N, Roux AVD, Redmond N, Himmelfarb CRD, Pettit B, et al. Cardiovascular Disease in Incarcerated Populations. J Am Coll Cardiol [Internet]. 2017 [cited 2022 Apr 13];69(24):2967-76. Available from: https://doi.org/10.1016/j.jacc.2017.04.040
7. Howell BA, Long JB, Edelman EJ, Mcginnis KA, Fiellin DA, Justice AC, et al. Incarceration history and uncontrolled blood pressure in a multi-site cohort. J Gen Intern Med [Internet]. 2016 [cited 2022 Feb 22];31(12):1496-502. Available from: https://doi.org/10.1007/s11606-016-3857-1
8. World Health Organization. Prisons and health [Internet]. Geneva, (CH): WHO Regional Europa; 2014 [cited 2023 Jan 13]. Available from: https://apps.who.int/iris/handle/10665/128603
9. Antonovsky A. Health, stress, and coping. San Francisco, CA(US): Jossey-Bass Publishers; 1979.
10. Antonovsky A. Unraveling the mistery of health. How People Manage Stress and Stay Well. San Francisco, AS(US): Jossey-Bass Publishers; 1987.
11. Mittelmark MB, Bauer GF. The Meanings of Salutogenesis. International Journal of Health Promotion and Education. In: Mittelmark MB, Bauer GF, Vaandrager L, Pelikan JM, Sagy S, Eriksson M,

et al. (org.). The Handbook of Salutogenesis [Internet]. 2nd ed. Zurique (CH): Springer Cham; 2022 [cited 2023 Jun 15]. Available from: https://doi.org/10.1007/978-3-030-79515-3

12. Eriksson M, Lindstrom B. Contextualizing salutogenesis and Antonovsky in public health development. Health Prom Inter [Internet]. 2006 [cited 2023 Feb 11];21(3):238-44. Available from: https://doi.org/10.1093/heapro/dal016

13. Vinje HF, Langeland E, Bull T. Aaron Antonovsky's Development of Salutogenesis, 1979–1994. In: In: Mittelmark MB, Bauer GF, Vaandrager L, Pelikan JM, Sagy S, Eriksson M, et al. (orgs). The Handbook of Salutogenesis [Internet]. 2nd ed. Zurique (CH): Springer Cham; 2022 [cited 2023 Feb 15]. p. 29-45. Available from: https://doi.org/10.1007/978-3-030-79515-3

14. Saboga-nunes L, Bittlingmayer UH, Okan O. Salutogenesis and health literacy: The health promotion simplex! In: Okan O, Bauer U, Levin-Zamir D, Pinheiro P, Sorensen K. (org.). International handbook of health literacy: research, practice and policy across the lifespan. Chicago, IL(US): Policy Press; 2019. p. 649-64.

15. Eriksson M, Lindstrom B. The salutogenic approach to the making of HiAP/Healthy Public Policy: Illustrated by a case study. Global Health Prom [Internet]. 2009 [cited 2023 Feb 22];16(1):17-28. Available from: https://doi.org/10.1177/1757975908100747

16. Antonovsky A. The salutogenic model as a theory to guide health promotion. Health Prom Inter [Internet]. 1996 [cited 2023 Feb 22];11(1):11-8. Available from: https://salutogenesi.org/images/PDF/The_salutogenic_model_as_a_theory_to_guide_health_promotion.pdf

17. Eriksson M, Lindstrom B. Life is more than survival: Exploring links between Antonovsky's salutogenic theory and the concept of resilience. In: Gow KM, Celinski MJ. Way finding through life's challenges: Coping and survival. New York, NY(US): Nova Science Publishers; 2011. p. 31-46.

18. Super S, Wagemakers MAE, Picavet HSJ, Verlooijen KT, Koelen MA. Strengthening sense of coherence: opportunities for theory building in health promotion. Health Promot Inter [Internet]. 2016 [cited 2023 Feb 22];31(4):869-78. Available from: https://doi.org/10.1093/heapro/dav071

19. Baybutt M, Chemlal K. Health-promoting prisons: theory to practice. Global Health Prom [Internet]. 2015 [cited 2022 Apr 13];23(1):66-74. Available from: https://doi.org/10.1177/1757975915614182

20. Woodall J, Viggiani N, South J. Salutogenesis in Prison. In: Mittelmark MB, Bauer GF, Vaandrager L, Pelikan JM, Sagy S, Eriksson M, et al. (org.). The Handbook of Salutogenesis [Internet]. 2nd ed. Zurique (CH): Springer Cham; 2022 [cited 2022 Feb 23]. Available from: https://link.springer.com/book/10.1007/978-3-030-79515-3

21. Minayo MCS, Assis SG, Souza ER. Avaliação de Programas Sociais por Triangulação de Métodos: abordagem de programas sociais. 5th ed. Rio de Janeiro, RJ(BR): Fiocruz; 2016.

22. Bardin L. Análise de conteúdo. São Paulo, SP(BR): Edições 70 Brasil; 2016.

23. Sousa JR, Santos SCM. Análise de conteúdo em pesquisa qualitativa: modo de pensar e de fazer. Pesq Debate Educ [Internet]. 2020 [cited 2023 Jun 16];10(2):1396-416. Available from: https://doi.org/10.34019/2237-9444.2020.v10.31559

24. Heidari R, Wangmo T, Galli S, Shaw DM, Elger BS. Accessibility of prison healthcare for elderly inmates, a qualitative assessment. J Forensic Legal Med [Internet]. 2017 [cited 2022 Feb 23];52:223-8. Available from: https://doi.org/10.1016/j.jflm.2017.10.001

25. Viggiani N. Unhealthy prisons: Exploring structural determinants of prison health. Sociol Health Illness [Internet]. 2007 [cited 2022 Feb 23];29(1):115-35. Available from: https://doi.org/10.1111/j.1467-9566.2007.00474.x

26. Costa KFL, Vieira AN, Bezerra STF, Silva LF, Freitas MC, Guedes MVC. Nursing theory for patients' compliance with the treatments of arterial hypertension and diabetes mellitus. Texto

Contexto Enferm [Internet]. 2021 [cited 2023 Jun 15];30:e20200344. Available from: https://doi.org/10.1590/1980-265X-TCE-2020-0344

27. Costa MC, Mantovani MF, Miranda FMD, Santos VS, Konczycki BS. Enfermería en las cárceles, una práctica de atención básica en salud: revisión narrativa. Cienc Enferm [Internet]. 2023 [cited 2023 Jun 16];29(6):1-15. Available from: https://revistas.udec.cl/index.php/cienciayenfermeria/article/view/8049

28. Woodall J. Exploring concepts of health with male prisoners in three category-C English prisons. Inter J Health Prom Educ [Internet]. 2010 [cited 2022 Jan 20];48:115-22. Available from: https://doi.org/10.1080/14635240.2010.10708194

29. Crewe B, Liebling A, Hulley S. Staff-prisoner relationships, staff professionalism, and the use of authority in public-and private-sector prisons. Law Social Inquiry [Internet]. 2015 [cited 2023 Jan 19];40(2):309-44. Available from: https://doi.org/10.1111/lsi.12093

30. Testoni I, Marrella F, Biancalani G, Cottone P, Alemanno F, Mamo D, et al. The value of dignity in prison: a qualitative study with life convicts. Behav Sci [Internet]. 2020 [cited 2023 Jan 18];10(6):95. Available from: https://doi.org/10.3390/bs10060095

31. Sfendla A, Malmström P, Torstensson S, Kerekes N. Yoga Practice Reduces the Psychological Distress Levels of Prison Inmates. Frontn Psych [Internet]. 2018 [cited 2023 Feb 18];9:407. Available from: https://doi.org/10.3389/fpsyt.2018.00407

32. Minayo MCS, Ribeiro AP. Condições de saúde dos presos do estado do Rio de Janeiro, Brasil. Ciênc Saúde Coletiva [Internet]. 2016 [cited 2023 Feb 20];21(7):2031-40. Available from: https://doi.org/10.1590/1413-81232015217.08552016

33. Vera-Remartínez EJ, Monge RL, Chinesta SG, Rodríguez DSA, Ramos MVP. Factores de riesgo cardiovascular en adultos jóvenes de un centro penitenciario. Rev Esp Salud Publica [Internet]. 2018 [cited 2023 Mar 15];92:e201807037. Available from: https://scielo.isciii.es/pdf/resp/v92/1135-5727-resp-92-e201807037.pdf

34. Brasil. Portaria Interministerial nº 1.777, de 9 de setembro de 2003: Dispõe sobre o Plano Nacional de Saúde no Sistema Penitenciário. Diário Oficial da União [Internet]. 2004 [cited 2023 Mar 15]; Available from: https://bvsms.saude.gov.br/bvs/saudelegis/gm/2003/pri1777_09_09_2003.html

35. Trotter RT, Lininger MR, Camplain R, Fofanov VY, Camplain C, Baldwin JA. A Survey of health disparities, social determinants of health, and converging morbidities in a county jail: a cultural-ecological assessment of health conditions in jail populations. Int J Environ Res Public Health [Internet]. 2018 [cited 2023 Feb 10];15(11):2500. Available from: https://doi.org/10.3390/ijerph15112500

36. Martins ELC, Martins LG, Silveira AM, Melo EM. O contraditório direito à saúde de pessoas em privação de liberdade: o caso de uma unidade prisional de Minas Gerais. Saúde Soc [Internet]. 2014 [cited 2023 Mar 01];23(4):1222-34. Available from: https://doi.org/10.1590/S0104-12902014000400009

37. Villafaina-Domínguez B, Collado-Mateo D, Merellano-Navarro E, Villafaina S. Effects of dog-based animal-assisted interventions in prison population: a systematic review. Animals [Internet]. 2020 [cited 2023 Mar 02];10(11):2129. Available from: https://doi.org/10.3390/ani10112129

38. Murraya J, Cokerb JF, Elseya H. Care farming: Rehabilitation or punishment? A qualitative exploration of the use of care farming within community orders. Health Place [Internet]. 2019 [cited 2023 Mar 15];58:102156 Available from: https://doi.org/10.1016/j.healthplace.2019.102156

NOTES

ORIGIN OF THE ARTICLE

Extracted from the dissertation – Chronic disease and health of people deprived of liberty in the light of the Salutogenic Theory: A mixed methods study, to be presented to the Graduate Program in Nursing, at the Universidade Federal do Paraná, in 2023.

CONTRIBUTION OF AUTHORITY

Study conception: Costa MC, Mantovani MF, Miranda FMD.
Data collection: Costa MC.
Data analysis and interpretation: Costa MC, Mendes FRP, Khalaf DK, Paz VP, Mantovani MF, Miranda FMD.
Discussion of the results: Costa MC, Mendes FRP, Khalaf DK, Paz VP, Mantovani MF, Miranda FMD.
Writing and/or critical revision of the content: Costa MC, Mendes FRP, Khalaf DK, Paz VP, Mantovani MF, Miranda FMD.
Revision and final approval of the final version: Costa MC, Mendes FRP, Khalaf DK, Paz VP, Mantovani MF, Miranda FMD.

ACKNOWLEDGMENT

To the Administrative Coordination of the penal units of the Regional of Foz do Iguaçu, Paraná, Brazil.

FUNDING INFORMATION

Conselho Nacional de Desenvolvimento Científico e Tecnológico (*CNPq*) – call CNPq/MS/SAPS/DEPROS no. 27/2020 – research on chronic noncommunicable diseases and associated risk factors.

APPROVAL OF ETHICS COMMITTEE IN RESEARCH

Approved by the Human Research Ethics Committee of the Health Sciences Sector of the Federal University of Paraná, opinion no. 4.618.359/2021, Certificate of Presentation for Ethical Appreciation 42695321.8.0000.0102e.

CONFLICT OF INTEREST

There is no conflict of interest.

HISTORICAL

Received: April 18, 2023.
Approved: June 22, 2023.

CORRESPONDING AUTHOR

Marta Cossetin Costa
m_cossetin@hotmail.com