Original Article

Care transition for patients admitted to hospital due to COVID-19 and its relationship with clinical characteristics

Transição de cuidado de pacientes internados por COVID-19 e sua relação com as características clínicas

Transición de cuidado de pacientes internados por COVID-19 y su relación con las características clínicas

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How to cite:
Winter VD, Berghetti L, Dezordi CC, Camera FD, Kolankiewicz AC. Care transition for patients admitted to hospital due to COVID-19 and its relationship with clinical characteristics. Acta Paul Enferm. 2024;37:eAPE00012.

DOI
http://dx.doi.org/10.37689/acta-ape/2024A000000122

Keywords
Continuity of patient care; COVID-19; Coronavirus infections; Patient discharge; Patient transfer

Descritores
Continuidade da assistência ao paciente; COVID-19; Infecções por coronavírus; Alta do paciente; Transferência de pacientes

Descriptores
Continuidad de la atención al paciente; COVID-19; Infecciones por coronavirus; Alta del paciente; Transferencia de pacientes

Submitted
January 25, 2023

Accepted
October 5, 2023

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Associate Editor (Peer review process):
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Abstract

Objective: To analyze care transition (CT) and its relationship with the clinical characteristics of patients admitted to hospital due to COVID-19.

Methods: This is a cross-sectional study, carried out in a general hospital, with 165 patients admitted to hospital due to COVID-19 and who were discharged home. Participants were those who had been admitted to hospital for at least 24 hours, over 18 years of age, with telephone access after discharge. Those who were discharged by transfer, who died or those without cognitive conditions were excluded. Data collected between March and July 2021, using a sociodemographic and clinical questionnaire as well as Care Transitions Measure-15. Descriptive and inferential statistical analysis was applied.

Results: The overall mean of Care Transitions Measure-15 was considered satisfactory (71.8±7.45). The Important preferences factor obtained the highest mean (80.5± 9.84) and the Care Plan factor the lowest (57.5± 11.4). Significant statistical differences were found when the CTM-15 factors were associated with the clinical variables: duration of chronic disease ($p<0.03$); presence of clinical artifact ($p<0.040$); use of continuous medication ($p<0.029$). Readmission had a significant difference in the factors Health management preparation ($p<0.045$), Important preferences ($p<0.027$) and Care plan ($p<0.032$).

Conclusion: Patients admitted to hospital due to COVID-19 assessed the general CT as satisfactory and the clinical variables, length of chronic illness, clinical artifact, continuous medication and readmission interfered in the CT of these patients.

Resumo

Objetivo: Analisar a transição do cuidado (TC), e sua relação com as características clínicas de pacientes internados por COVID-19.

Métodos: Estudo transversal, realizado em um hospital geral, com 165 pacientes hospitalizados em decorrência da COVID-19 e que receberam alta para o domicílio. Participaram aqueles que estiveram internados por pelo menos 24hs, maiores de 18 anos, com acesso telefônico após a alta. Excluídos aqueles que receberam alta por transferência, que evoluíram a óbito ou aqueles sem condições cognitivas. Dados coletados entre março a julho de 2021, por meio de questionário sociodemográfico e clínico, bem como o *Care Transitions Measure-15*. Aplicou-se análise estatística descritiva e inferencial.

Resultados: A média geral do *Care Transitions Measure-15* foi considerada satisfatória (71,8±7,45). O fator Preferências Asseguradas obteve maior média (80,5± 9,84) e o fator Plano de Cuidados a menor (57,5± 11,4). Foram encontradas diferenças estatísticas significativas quando se associou os fatores do CTM-15 com as variáveis clínicas tempo de doença crônica ($p<0,03$), presença de artefato clínico ($p<0,040$), uso

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Conflict of interest: nothing to declare.

de medicação contínua (p<0,029) e a reinternação teve diferença significativa nos fatores Preparação para o Autogerenciamento (p<0,045), Preferências Asseguradas (p<0,027) e Plano de Cuidados (p<0,032).

Conclusão: Os pacientes hospitalizados por COVID-19 avaliaram a TC geral como satisfatória e as variáveis clínicas tempo de doença crônica, artefato clínico, medicação contínua e reinternação interferiram na TC desses pacientes.

Resumen

Objetivo: Analizar la transición del cuidado (TC) y su relación con las características clínicas de pacientes internados por COVID-19.

Métodos: Estudio transversal, realizado en un hospital general, con 165 pacientes hospitalizados como consecuencia de COVID-19, que fueron dados de alta para volver a su domicilio. Participaron aquellas personas que estuvieron internadas por lo menos 24 horas, mayores de 18 años, con acceso telefónico después del alta. Se excluyeron aquellas que fueron dadas de alta por transferencia, que fallecieron o que no tenían condiciones cognitivas. Los datos fueron recopilados entre marzo y julio de 2021, mediante cuestionario sociodemográfico y clínico, así como también el *Care Transitions Measure-15*. Se aplicó análisis estadístico descriptivo e inferencial.

Resultados: El promedio general del *Care Transitions Measure-15* fue considerado satisfactorio (71,8±7,45). El factor Preferencias Aseguradas obtuvo el mayor promedio (80,5± 9,84) y el factor Plan de Cuidados, el menor (57,5± 11,4). Se encontraron diferencias estadísticas significativas cuando se asociaron los factores del CTM-15 con las variables clínicas tiempo de enfermedad crónica (p<0,03), presencia de artefacto clínico (p<0,040), uso de medicación continua (p<0,029). La reinternación tuvo una diferencia significativa en los factores Preparación para la Autogestión (p<0,045), Preferencias Aseguradas (p<0,027) y Plan de Cuidados (p<0,032).

Conclusión: Los pacientes hospitalizados por COVID-19 evaluaron la TC general como satisfactoria. Las variables clínicas tiempo de enfermedad crónica, artefacto clínico, medicación continua y reinternación interfirieron en la TC de estos pacientes.

Introduction

The pandemic context caused by the new Coronavirus SARS-CoV-2 (COVID-19) meant that health systems needed to be quickly readjusted to deal with a disease with high transmissibility.[1] The virus, whose epicenter was in the Chinese city of Wuhan in December 2019, caused the World Health Organization (WHO) to declare a state of Public Health Emergency of International Concern (PHEIC) on January 30, 2020, due to its rapid spread.[2]

Since then, new care demands have resulted in the overload of hospital units as well as health professionals' exhaustion.[3] Such conditions reflect negatively on the quality of care provided to a wide group of patients who have different needs after hospital discharge, given the lack of in-person health care due to the need for continuous isolation.[4] Furthermore, some patients infected by COVID-19 may progress to a serious state of the disease and acquire sequels that they will need to live with for some period of time.[5] Therefore, the importance of continuity of care is highlighted as a way to prevent readmissions after hospital admission due to COVID-19.[6]

In this sense, care transition (CT) consists of actions that aim at the continuity of health care when transferring between different services and locations.[7] Its importance stands out in the current scenario as it benefits both patients and the health care system as a whole,[4] because effective transitions result in both improved quality of care, a reduction in unnecessary readmissions and reduced costs for the healthcare system.[8]

It is known that patients who are discharged from hospital require continuous health monitoring and a care plan carried out by the team responsible for their discharge.[4] However, studies show weaknesses in care planning at discharge,[8,9] which results in CT fragility. The multidisciplinary team, and in particular nurses, is responsible for adopting strategies that facilitate CT, such as: discharge planning; outpatient monitoring; monitoring and managing symptoms after discharge; management education and promotion; medication safety; organization, clarity and timely availability of information; and communication and coordination of care among health team members.[10] Therefore, it is necessary that the role of nurses in coordinating CT is strengthened.[8]

A study carried out with nurses from clinical inpatient units identified that the majority of them did not carry out follow-up after discharge from the hospital. From the perspective of these professionals, the main challenges in performing CT are weaknesses in the coordination between health services to refer patients to Primary Health Care (PHC), inadequate communication among the health team, little in-service training and lack of protocols to help professionals.[11]

Randomized clinical study carried out in China observed that patients admitted to hospital due to COVID-19 and who received transitional care had clinical improvement in their symptoms when compared to patients who received usual care, in addition to a reduction in hospital stay.[12] However, in Brazil CT strategies used by health professionals are still incipient, requiring more studies that reinforce the importance of the topic in the context of health actions[10] as well as identify how CT occurs from the hospital to the home.

Therefore, this research is justified by the incipience of studies that address CT in Brazil and mainly from the perspective of patients admitted to hospital due to COVID-19 as well as the identification of clinical variables that interfere with this process. Identifying these variables can help develop effective strategies to improve CT quality and reduce readmission.

Considering the above, the guiding question of this study is: how do CT scans of patients admitted to hospital due to COVID-19 go from the hospital to the community and what is its relationship with clinical characteristics? To this end, the general objective was to analyze CT and its relationship with the clinical characteristics of patients admitted to hospital due to COVID-19.

Methods

This is a cross-sectional study carried out in a COVID-19 Clinical Inpatient Unit of a general hospital in the northwest region of the state of Rio Grande do Sul, Brazil, which has 126 inpatient beds, with a hospital occupancy rate that varies between 83 to 87% monthly.

Patients admitted to hospital with a medical diagnosis of COVID-19 recorded in the medical record, aged 18 years or over, with a length of hospital admission of at least 24 hours and telephone access after hospital discharge were eligible for the study. Patients transferred to another hospital or those who died were excluded as well as those who, according to the researcher's assessment, did not have the physical and/or psychological conditions to answer the questionnaires. Participant selection was by consecutive sampling.

First, the objectives of the study were explained and an invitation to participate was made. After acceptance, they signed the Informed Consent Form (ICF) in two copies, of equal content, and answered a questionnaire on sociodemographic issues, prepared by the researchers. The instrument was applied to patients or family members by a master's degree nurse, during hospital admission, at the bedside. Subsequently, data were collected from the medical records such as date of hospital admission, presence of clinical artifacts, use of continuous medication, whether readmitted within 30 days. Study participants were informed that they would receive a telephone call between seven and thirty days after discharge to complete the Care Transition Measure-15 (CTM-15), instrument that measures the quality of CT from hospital discharge to home or between different services, from the perspective of patients and/or families/caregivers. It is a questionnaire that can be administered by telephone[13] and was recently validated for use in Brazil.[14]

The CTM-15 includes 15 questions, divided into four factors: "Health management preparation", which refers to preparing patients and their family for health management at home after discharge; "Medication understanding", which corresponds to understanding patients and their family about the appropriate use of medications after hospital discharge; "Important preferences", which concerns the team's consideration of patients' opinions and preferences in relation to their treatment; and finally, "Care plan", which refers to the valorization of a care plan, consultations or tests to be carried out after discharge.[8,10]

The instrument is assessed using a five-point scale: Do not know/do not remember/not applicable = 0; Totally disagree = 1 point; Disagree = 2 points; Agree = 3 points; Totally agree = 4 points. Based on participants' answers, a score is assigned, and to calculate the means, a formula is applied that transforms the results obtained into scores from 0 to 100.[15] Higher scores indicate better CT quality. Even though there is no cut-off point, the authors consider scores equal to or greater than 70 as satisfactory.[14]

Data collection was carried out between March and October 2021. The initially collected data was double entered to assess inconsistencies and make corrections. Afterwards, they were processed and analyzed using the Statistical Package for the Social Sciences version 21.0, applying descriptive and inferential statistics. Continuous variables were compared between two independent groups using Student's t-test. When three or more independent groups were involved, the comparison occurred using Analysis of Variance - ANOVA (One Way) - Post Hoc Tukey (independent groups of similar sizes) or Scheffé (independent groups of very different sizes and/or heterogeneity of variances).

Research was approved by the Research Ethics Committee, under Consubstantiated Opinion 4,479,127 (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration: 38915820.1.0000.5350), December 21, 2020, and respected all ethical precepts, as governed by Brazilian legislation.

Results

A total of 165 patients participated in the study, of which 56.4% (93) were male, 81.8% (135) were white, 73.3% (121) were married or in a stable relationship. Regarding education, 49.1% (81) had incomplete elementary school (Table 1).

Regarding the CT assessment, the overall mean of CTM-15 was considered satisfactory (71.8±7.45). The Important preferences factor obtained the highest mean (80.5± 9.84) and the Care plan factor obtained the lowest (57.5± 11.4) (Table 2).

Patient clinical characteristics were compared with CTM-15 factors (Table 4). When comparing patients' length of stay, there was no statistical difference between the groups. However, when comparing the number of hospital admissions in the last year, a statistical difference was evident in the Medication understanding factor (p<0.029), with patients with four or more hospital admissions having lower means. Regarding the presence of clinical artifact after discharge, the Important preferences factor showed a statistical difference between the groups (p<0.040). Regarding readmission, there was a significant difference in the factors Health management preparation (p<0.045), Important preferences (p<0.027) and Care plan (p<0.032). There was no statistical difference when comparing those who had or did not have NCDs, but on the other hand, the duration of NCDs presented p<0.03 in the Care plan factor (Table 3).

Table 1. Sociodemographic characterization of patients admitted to hospital due to COVID in a general hospital (n=165)

Variables	n(%)
Age	
18 to 59 years	117(71.0)
60 and older	48(29.1)
Sex	
Female	72(43.6)
Male	93(56.4)
Race*	
White	135(81.8)
Black/brown/indigenous	29(17.5)
Marital status	
Single/widow/divorced	44(26.7)
Married/stable union	121(73.3)
Education*	
Illiterate	7(4.2)
Incomplete elementary school	81(49.1)
Complete elementary school	15(9.1)
Incomplete high school	5(3.0)
Complete high school	38(23.0)
Higher education	15(9.1)
Income**	
None	13(7.9)
Less than R$ 1,100.00	2(1.2)
R$ 1.101,00 and 3,299.00	106(64.2)
R$3.300,00 and 5,499.00	33(20.0)
≥R$5,500.00	11(6.7)

*Missing data; **Minimum wage in 2021: 1,100.00

Table 2. Central tendency and variability measures for CTM-15 factors

CTM-15 estimates (n=165)					
Overall CMT-15	Mean	Standard deviation	Breadth		Median
			Minimum	Maximum	
	71.8	7.45	57.14	100	70.8
Factors					
Health management preparation	79.1	9.2	57.1	100	78.6
Medication understanding	70.2	10.6	41.6	100	66.7
Important preferences	80.5	9.84	50.0	100	83.3
Care plan	57.5	11.4	37.5	100	50.0

Table 3. Mean and standard deviation of CTM-15 factors according to the clinical characteristics of patients with COVID-19

Variables	n	CTM-15 factors							
		Health management preparation		Medication understanding		Important preferences		Care plan	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Length of hospital admission									
De 1 to 5 days	70	78.9	9.8	71.0	11.3	80.9	8.8	57.5	11.1
De 6 to 14 days	67	80.4	8.5	68.9	10.0	80.4	11.0	56.3	11.5
Above 14 days	28	76.1	8.6	71.4	10.2	79.4	9.4	60.2	11.8
p[Y]		0.110		0.402		0.797		0.315	
Has DCNT									
Yes	128	78.9	9.4	70.1	10.4	80.9	10.2	58.2	11.9
No	37	79.8	8.4	70.7	11.2	79.0	8.4	55.0	9.0
p[X]		0.612		0.779		0.196		0.133	
NCD how long ago*									
Less than 6 months	3	82.1	15.5	80.5	17.3	86.1	12.7	75.0a	21.6
6 to 12 months	6	80.3	12.3	69.4	8.6	80.5	8.6	60.4b	12.2
1 to 3.5 years	17	78.5	9.1	65.6	9.7	80.3	8.8	58.8bc	14.4
3.5 to 6.5 years	31	78.6	10.7	70.1	11.3	82.2	11.5	60.8b	11.0
6.5 to 10 years	22	75.0	6.7	69.7	9.8	76.5	11.6	57.3bc	9.1
Moren than 10 years	29	80.1	8.7	69.5	10.0	82.1	9.8	54.3c	11.7
p[Y]		0.519		0.460		0.279		0.030	
Continuous medication									
Yes	100	78.7	9.1	68.8	10.0	80.9	10.5	58.0	11.7
No	64	79.5	9.4	72.3	11.2	79.8	8.6	56.6	11.1
p[X]		0.595		0.037		0.456		0.461	
Post-discharge clinical artifact									
Yes	15	82.6	8.19	71.6	10.8	85.0	7.8	61.6	11.0
No	150	78.7	9.25	70.1	10.6	80.0	9.9	57.0	11.4
p[X]		0.103		0.603		0.035		0.064	
Readmission after 30d									
Yes	6	69.6	8.37	66.6	9.12	76.3	3.40	60.4	5.10
No	159	79.4	9.07	70.3	10.6	80.6	9.9	57.3	11.6
p[X]		0.034		0.370		0.026		0.234	

Discussion

The study results indicate that the overall CT quality perceived by patients admitted to hospital due to COVID-19 was considered satisfactory (71.8). Factors with the highest scores were "Important preferences" and "Health management preparation", and the with lowest score, "Care plan". Clinical variables with statistical differences were time since diagnosis of chronic disease, use of post-discharge clinical artifact, use of continuous medication and readmission within 30 days. There was also a statistical difference related to the use of CT strategies for these patients.

The literature indicates that having chronic diseases represents a high risk factor for worsening symptoms and the need for hospital admission in COVID-19 patients.[16,17] In our study, we saw that the majority of admitted to hospital patients (77.6%) had at least one chronic disease, which corroborates the aforementioned authors.

It was also found that those who had been diagnosed with the disease for a longer period of time had a negative assessment of care plan compared to those who had had the disease for less time, which may be related to the fact that there is greater health-disease process management among those who have been living with the disease for a longer time and, therefore, demand more from the care plan. Furthermore, patients with a chronic illness or chronic condition need to learn about their illness and manage their care, which is a process that extends over time.[18]

Furthermore, a study identified a positive influence of diagnostic time on the self-care process of patients with chronic disease.[19] A study that identified the experiences of chronic admitted to hospital patients highlights the need for health professionals

to understand patients' history, in order to identify their real health needs to define a care plan.[20] In this way, patient-centered care and their individual needs are valued.

Linked to the presence of comorbidities is the need for continuous medication. In the present study, around 60.6% of participants were continuously using some medication. Furthermore, a significant statistical difference was observed between groups in the "Medication understanding", which found that those who continuously use them were dissatisfied with the guidelines regarding prescribed medications.

A study carried out with admitted to hospital patients who were discharged from hospital with at least one medication prescribed at discharge showed that only 29% of those interviewed received instructions from the doctor regarding the use of medications, which negatively interferes with their understanding of the proposed treatment.[21] This lack of information and understanding can generate gaps in patient knowledge and lead to low adherence to pharmacotherapy.[22]

Patients who were discharged from hospital followed up by the use of clinical artifacts rated the Important preferences factor better compared to those who did not use them, which may be related to the fact that these patients receive more guidance on the correct handling of these devices at home as well as where to turn if they need help. According to the literature, patients using clinical devices after hospital discharge need to receive adequate information about clinical device care and which health service to seek in case of complications.[23]

Regarding the need for readmission due to the disease, the rates are low, but when they do occur, they are related to respiratory causes and disease symptom prolongation.[24] Furthermore, a systematic review with meta-analysis concluded that readmissions of COVID-19 patients are more common in patients with multiple comorbidities.[25] This evidence corroborates the present study, as only 3.6% of the sample was readmitted within 30 days and 80% had NCDs.

Furthermore, this variable presented a statistical difference by demonstrating that those who were readmitted perceived health management preparation and important preferences negatively when compared to those who were not readmitted to the hospital. A study observed weaknesses in discharge planning and in patient/caregiver inclusion by the health team due to the disregard of users' preferences when carrying out a care plan.[26] In this regard, it is important to train and involve patients and families in the discharge planning process, by jointly identifying and determining individual needs for returning home.[26] Furthermore, information when shared promotes autonomy and adherence to treatment by users.[9]

Regarding age, it was identified that the majority of patients admitted to hospital due to COVID-19 (71%) were adults, a profile that is in line with a Brazilian study that identified a change in the age range of patients admitted in 2020, of which the elderly population predominated, compared to those admitted in 2021, where 59% of those admitted were under 60 years old.[27]

Research carried out in Spain with patients who required hospital admission due to COVID-19 showed the high frequency of the presence of respiratory, systemic, neurological and dermatological symptoms after 6 months of hospital discharge, which were associated with the high demand for emergency services, hospital readmissions and deaths after discharge. In this regard, the authors highlight the need for monitoring strategies and individualized care in primary care services in order to avoid negative outcomes.[28]

Research carried out in England with primary care professionals identified that delivering the discharge summary directly to patients is a healthy practice that provides users with greater autonomy, inclusion, understanding, transparency of communication, in addition to serving as a reminder, like the medications that are prescribed.[29] Furthermore, telephone contact between different teams involved in patient care is seen as a challenge due to the varied work demands that often do not allow them to be available at the same time for the transfer of care to be carried out.[30]

Regarding the limitations of this study, its design is highlighted because cross-sectional studies demonstrate the diagnosis of reality, its asso-

ciations, but do not indicate the cause and effect. Furthermore, the study was carried out in only one hospital, which may not generalize the data.

New studies are suggested with other methodological approaches in order to understand these findings as well as testing evidence-based interventions.

Conclusion

Patients admitted to hospital due to COVID-19 rated their overall CT as satisfactory. It was observed that the Important preferences factor obtained the highest mean, while the Care plan factor obtained the lowest mean, in agreement with other studies previously carried out, which demonstrates the need for the health team to improve their strategies regarding care planning at hospital discharge, reinforcing the necessary guidance for patients and family. It was found that clinical variables such as the presence of chronic diseases, use of continuous medications, clinical devices and readmission within 30 days interfered in CT scan of patients admitted to hospital due to COVID-19.

Collaborations

Winter VDB, Berghetti L, Dezordi CCM, Camera FDM and Kolankiewicz ACB declare that they contributed to study design, data analysis and interpretation, article writing, relevant critical review of intellectual content and approval of the final version to be published.

References

1. Medina MG, Giovanella L, Bousquat A, Mendonça MH, Aquino R. Atenção primária à saúde em tempos de COVID-19: o que fazer? Cad Saúde Pública. 2020;36(8):e00149720.
2. World Health Organization (WHO). Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV). Geneva: WHO; 2020 [cited 2021 Sep 15]. Available from: https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)
3. Teixeira CF, Soares SM, Souza EA, Lisboa ES, Pinto IC, Andrade LR, et al. A saúde dos profissionais de saúde no enfrentamento da pandemia de Covid-19. Cien Saude Colet. 2020;25(9):3465-74.
4. Loerinc LB, Scheel AM, Evans ST, Shabto JM, O'Keefe GA, O'Keefe JB. Discharge characteristics and care transitions of hospitalized patients with COVID-19. Healthc (Amst). 2021;9(1):100512.
5. Estrela MC, Oliveira MH, Souza NC, Estrela CR. Covid-19: sequelas fisiopatológicas e psicológicas nos pacientes e na equipe profissional multidisciplinar/ Covid-19: physiopathological and psychological sequels in patients and in the multidisciplinar professional team. Braz J Develop. 2021;7(6):59138-52.
6. Atalla E, Kalligeros M, Giampaolo G, Mylona EK, Shehadeh F, Mylonakis E. Readmissions among patients with COVID-19. Int J Clin Pract. 2021;75(3):e13700.
7. Coleman EA, Boult C; American Geriatrics Society Health Care Systems Committee. Improving the quality of transitional care for persons with complex care needs. J Am Geriatr Soc. 2003;51(4):556-7.
8. Acosta AM, Lima MA, Pinto IC, Weber LA. Care transition of patients with chronic diseases from the discharge of the emergency service to their homes. Rev Gaucha Enferm. 2020;41(Spe):e20190155.
9. Rodrigues CD, Lorenzini E, Onwuegbuzie AJ, Oelke ND, Garcia CF, Malkiewiez MM, et al. Care transition from the perspectives of oncological patients and the multiprofessional care team: a mixed methods study. Cancer Nurs. 2022 Dec 1.
10. Alievi MF, Loro MM, Lorenzini E, Flôres GC, Domenico EB, Kolankiewicz AC. Transition of care for stomatic patients:convergent care research contributions. Rev Pesq Cuid Fundam. 2022;14:e11631.
11. Acosta AM, Câmara CE, Weber LA, Fontanele RM. Nurse's activities in care transition: realities and challenges. Rev Enfer UFPE Online. 2018;12(12):3190.
12. Sun L, Li B, Li J, Hu C. Influence of transitional care on the clinical manifestations among patients with COVID-19: a single-center, double-blinded, randomized survey. Exp Ther Med. 2022;25(1):16.
13. Coleman EA, Mahoney, Parry C. Assessing the quality of preparation for posthospital care from the patient's perspective the care transitions measure. Medical Care. 2005;43(3):246-55.
14. Acosta AM, Lima MA, Marques GQ, Levandovski PF, Weber LA. Brazilian version of the Care Transitions Measure: translation and validation. Int Nurs Rev. 2017;64(3):379-87.
15. Weber LA, Lima MA, Acosta AM. Quality of care transition and its association with hospital readmission. Aquichan. 2019;19:e1945.
16. Istituto Superiore Di Sanità. Characteristics of SARS-CoV-2 patients dying in Italy. Report based on available data on September 7th, 2020. Roma: EpiCentro; 2020 [cited 2021 Set 15]. Available from: https://www.epicentro.iss.it/en/coronavirus/bollettino/Report-COVID-2019_7_september_2020.pdf
17. Cavalcanti PM, Monteiro AF, Nascimento AP, Araújo LG, Cavalcante ML, Rodrigues RC. Coronavírus: uma revisão histórica e bibliográfica. Rev Interd Saúde. 2020;7(1):1696-710.
18. Chan SW. Chronic disease management, self-efficacy and quality of life. J Nurs Res. 2021;29(1):e129.
19. Brevidelli MM, Oliveira AB, Rodrigues GV, Gamba MA, Domenico EB. Fatores sociodemográficos, clínicos e psicossociais correlacionados ao autocuidado em diabetes. Rev Cuidarte. 2021;12(2):e2057.
20. Kuluski K, Hoang SN, Schaink AK, Alvaro C, Lyons RF, Tobias R, et al. The care delivery experience of hospitalized patients with complex chronic disease. Health Expect. 2013;16:e111–23.

21. Feitosa GG, Coelho JL, Santana WJ, Mendes RC, Saraiva SE, Rangel FE. Nível de Compreensão de Pacientes Internados em um Hospital da Região Metropolitana do Cariri-CE sobre os Medicamentos Prescritos na Alta Hospitalar. Id on Line Rev Mult Psic. 2020;14(49):412-26.

22. Lupatini EO, Munck AK, Bastos RR, Vieira RC. Conhecimento dos pacientes de um hospital de ensino a respeito dos medicamentos prescritos na alta. HU Rev 2016;42(4):315-22.

23. Lima AC. Mentoria das orientações aos pacientes de alta hospitalar em uso de dispositivos invasivos em uma unidade de clínica cirúrgica. Enfermagem Promoção e Prevenção da Saúde. Paraná: Científica Digital; 2022. pp.134-50.

24. Huang CW, Desai PP, Wei KK, Liu IA, Lee JS, Nguyen HQ. Characteristics of patients discharged and readmitted after COVID-19 hospitalisation within a large integrated health system in the United States. Infect Dis (Lond). 2021;53(10):800-4.

25. Subramaniam A, Lim ZJ, Reddy MP, Shekar K. Revisão sistemática e meta-análise das características e resultados dos sobreviventes readmitidos do COVID-19. Inter Med J. 2021;51(11):1773-80. Review.

26. Valente SH, Zacharias FC, Fabriz LA, Schönholzer TE, Ferro D, Tomazela M, et al. Transition of elder care from hospital to home: nursing experience. Acta Paul Enferm. 2022;35:eAPE02687.

27. Silva LP. Alteração do perfil de pacientes internados por COVID-19 no Vale do Paranhana-RS. Rev Eletr Acervo Saúde. 2022;15(4):e9769.

28. Romero-Duarte Á, Rivera-Izquierdo M, Guerrero-Fernández de Alba I, Pérez-Contreras M, Fernández-Martínez NF, Ruiz-Montero R, et al. Sequelae, persistent symptomatology and outcomes after COVID-19 hospitalization: the ANCOHVID multicentre 6-month follow-up study. BMC Med. 2021;19(1):129.

29. Weetman K, Dale J, Spencer R, Scott E, Schnurr S. GP perspectives on hospital discharge letters: an interview and focus group study. BJGP Open. 2020;4(2):bjgpopen20X101031.

30. Moraes KB, Riboldi CO, Silva KS, Maschio J, Stefani LP, Tavares JP. Transferência do cuidado de pacientes com baixo risco de mortalidade no pós-operatório: relato de experiência. Rev Gaúcha Enferm, 2019;40(Esp):e20180398.