

Decreasing the 30-Day Sepsis Readmission Rate through Nurse Education in a Medical Surgical Unit

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Introduction & Background

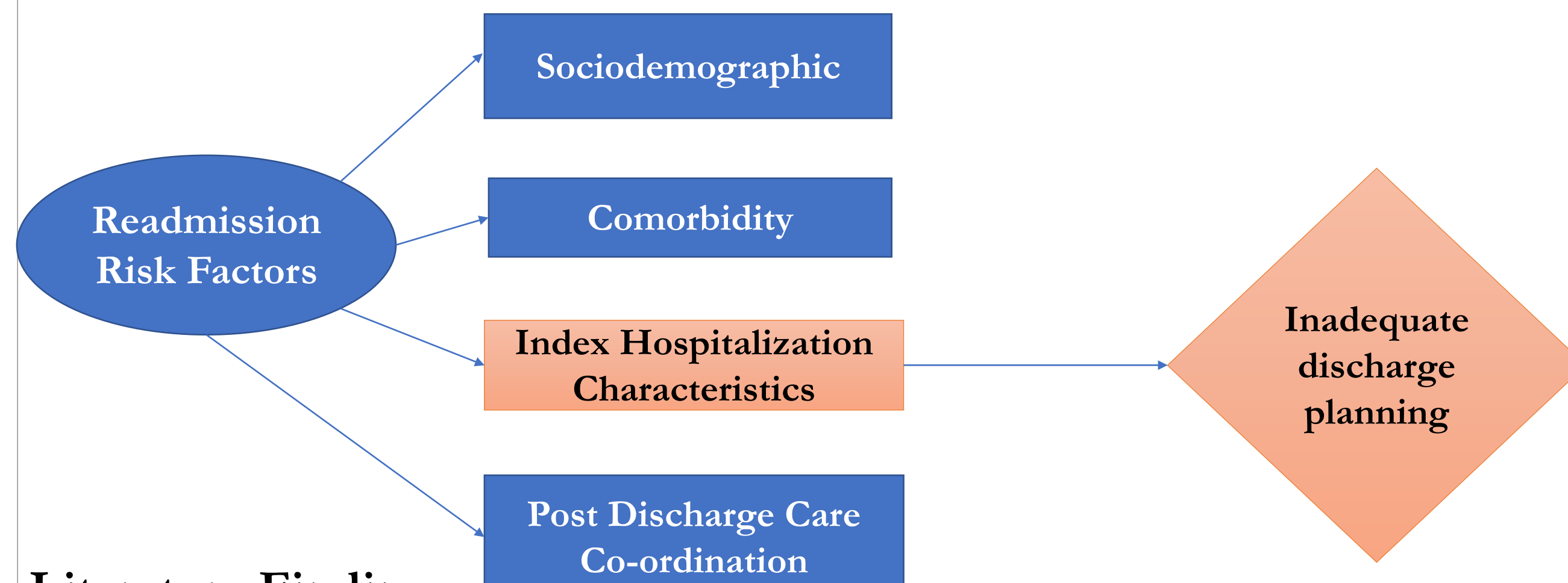
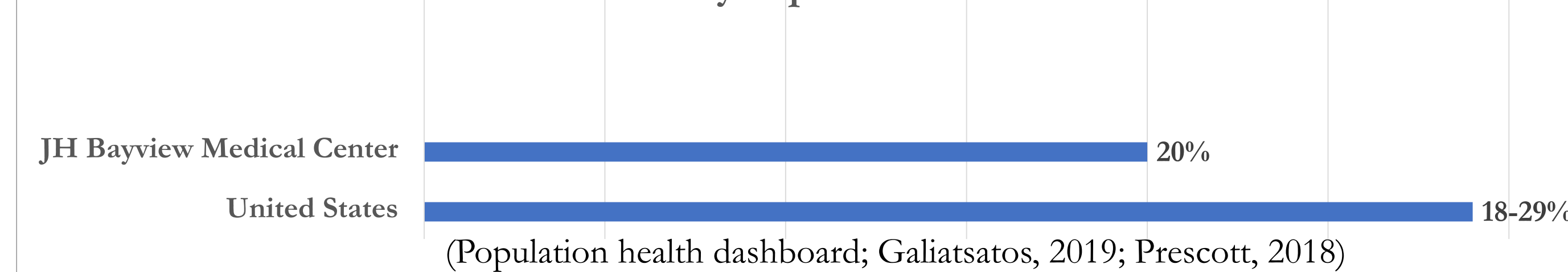
Sepsis Incidence-Global & National

	World	United States
Develop Sepsis	49 million	1.7 million
Survive Sepsis	38 million (78%)	1.4 million (82%)

(WHO, 2020; CDC, 2020; Sepsis Alliance, 2021)

- 1/3rd survivors require readmission (Zilberberg et al., 2015)

30- Day Sepsis Readmission Rate



Literature Findings:

- Sepsis readmissions are preventable (Prescott, 2018)
- Survivorship education reduces readmissions (Chen et al., 2020; DiPalo et al., 2017; Krumholtz et al., 2002; Rice et al., 2018)

Problem Statement: No standardized education on sepsis survivorship for nurses.

Purpose:

Decrease the 30- day sepsis readmission rate of a single adult inpatient acute care medical surgical unit by increasing nurses' knowledge on the challenges of sepsis survivorship.

Methods

Participants: 21 RNs of Bridgeview Unit of JHBMC with all employment status including new hires.

Intervention: 50- minute online educational module on sepsis survivorship

Access: Hospital or personal computers or smart phones to register and complete the course

Measurements:

- pre/post test assessment of knowledge using knowledge questionnaire by Sepsis Alliance Institute.
- 30-day sepsis readmission rate from Population health dashboard

Analysis: Descriptive statistics; Wilcoxon Signed Rank Test

Results

Aim 1

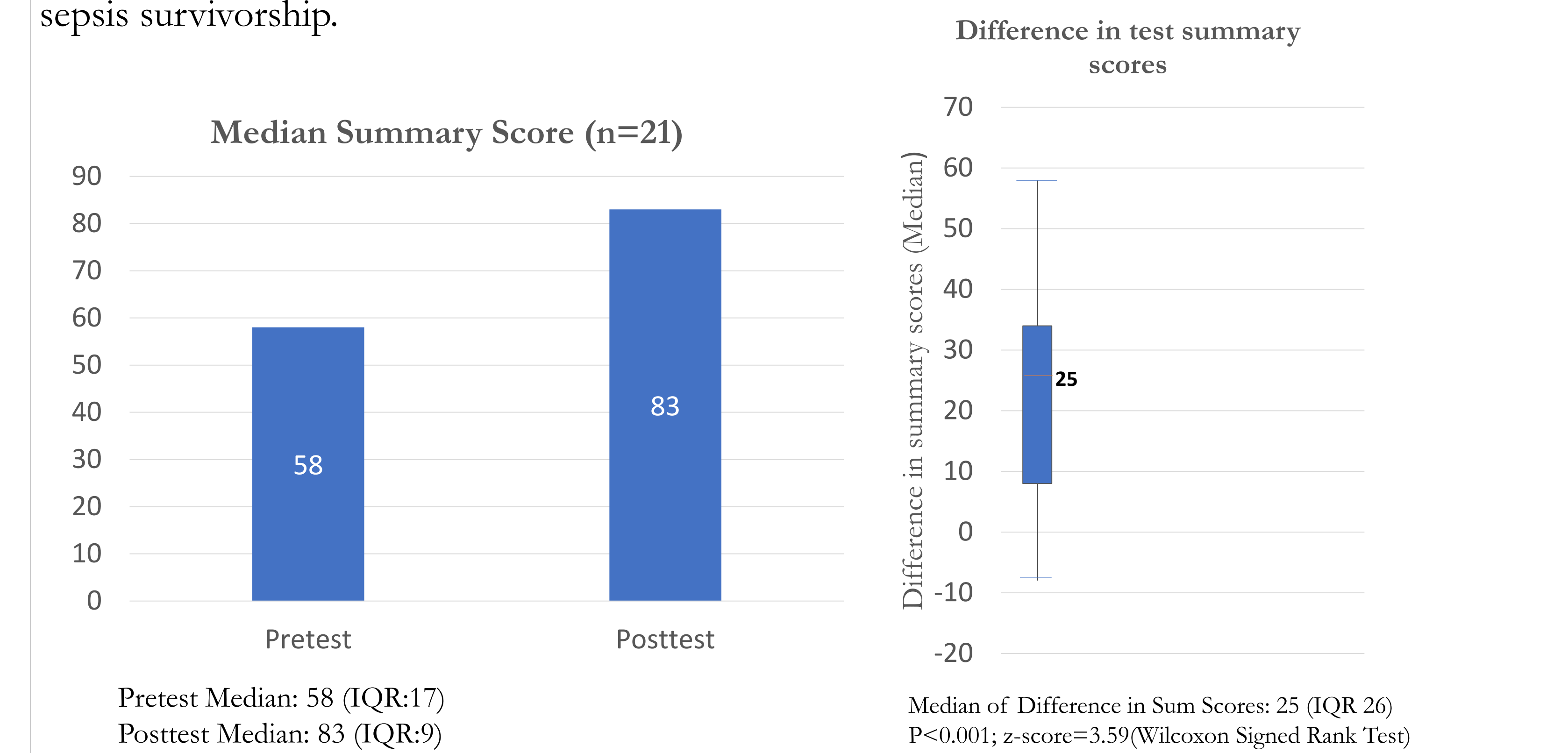
Aim 1: Determine the baseline 30-day sepsis readmission rate of the unit

	May-July- 2020 (3 months)	May-July 2019 (3 months)
No of discharges with primary diagnosis sepsis/ severe sepsis/ septic shock	28	21
Readmitted within 30 days of discharge	2	7
30-day sepsis readmission rate	7.1%	33.3%

Aim 2 & 3

Aim 2: Determine the baseline knowledge of the nurses of the unit on the challenges of sepsis survivorship and provide online educational course on survivorship over an 8- week period.

Aim 3: Measure the effects of educational intervention on nurses' knowledge on the challenges of sepsis survivorship.



Aim 4

Aim 4: Measure the effects of educational intervention on 30-day sepsis readmission rate of the unit.

	May- July 2020 (3 months)	October- December 2020 (3 months)
No of discharges with primary diagnosis sepsis/sever sepsis/septic shock	28	26
Readmitted within 30- days of discharge	2	5
30-day sepsis readmission rate	7.1%	19.2%

Conclusion, Dissemination & Sustainability

- Online educational module improved nurses' knowledge on the challenges of sepsis survivorship
- Benefits of online educational module:
 - Time- efficient
 - Cost- effective
 - Unbiased
 - Possible to view multiple times
 - Can be finished at own convenience
- Due to the influence of COVID-19 pandemic on the readmission rate, the effect of the intervention on 30- day sepsis readmission is inconclusive.
- Nurses being the primary health care members involved in discharge education, improvement in nurse knowledge could be suggested to have clinical significance in reducing readmission.
- Additional studies including patient education over prolonged time span are needed to determine statistical significance.
- Next Steps
 - Sustainability: Implementation as Unit's
 - New Hire Orientation Competency
 - Annual Competency
- Dissemination through project presentation at
 - Hospital Sepsis Readmission work group
 - Project site in unit staff meeting
 - Sepsis Alliance Webinar
- Submission of the intervention to relevant peer reviewed journals

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References

