

# Doctors' perceived coordination of care across care levels according to country of origin in public healthcare networks of Brazil and Chile

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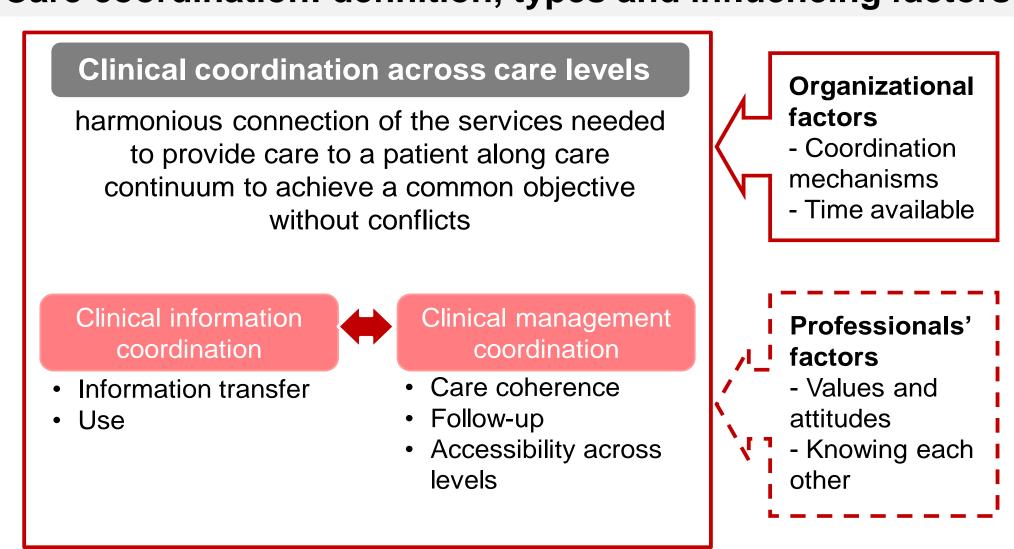
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### **BACKGROUND**

- >> Improving clinical coordination across care levels is a means to improve quality and efficiency in healthcare.
- >> Problems in clinical coordination remain in Latin American healthcare systems.

#### Care coordination: definition, types and influencing factors



Source: own elaboration based on Terraza R, et al.(2006), Reid R, et al (2002), Vargas I, et al (2014).

>> Objective: To explore differences in doctors' perceptions of clinical coordination across care levels in public healthcare networks of Brazil and Chile according to country of origin.

## **METHODS**

#### >> Design

Cross-sectional study based on the COORDENA survey of doctors (May-October 2015)

#### >> Study areas

Two public healthcare networks in:

- Brazil (Recife and Caruaru)
- Chile (Santiago, Red Metropolitana Norte and Red Metropolitana Sur)

### >> Study population and sample

Primary care (PC) and secondary care (SC) doctors that had been working for at least three months in the study network. n=729 (minimum of 174 per network)

## >> Questionnaire

COORDENA questionnaire adapted, pretested and piloted

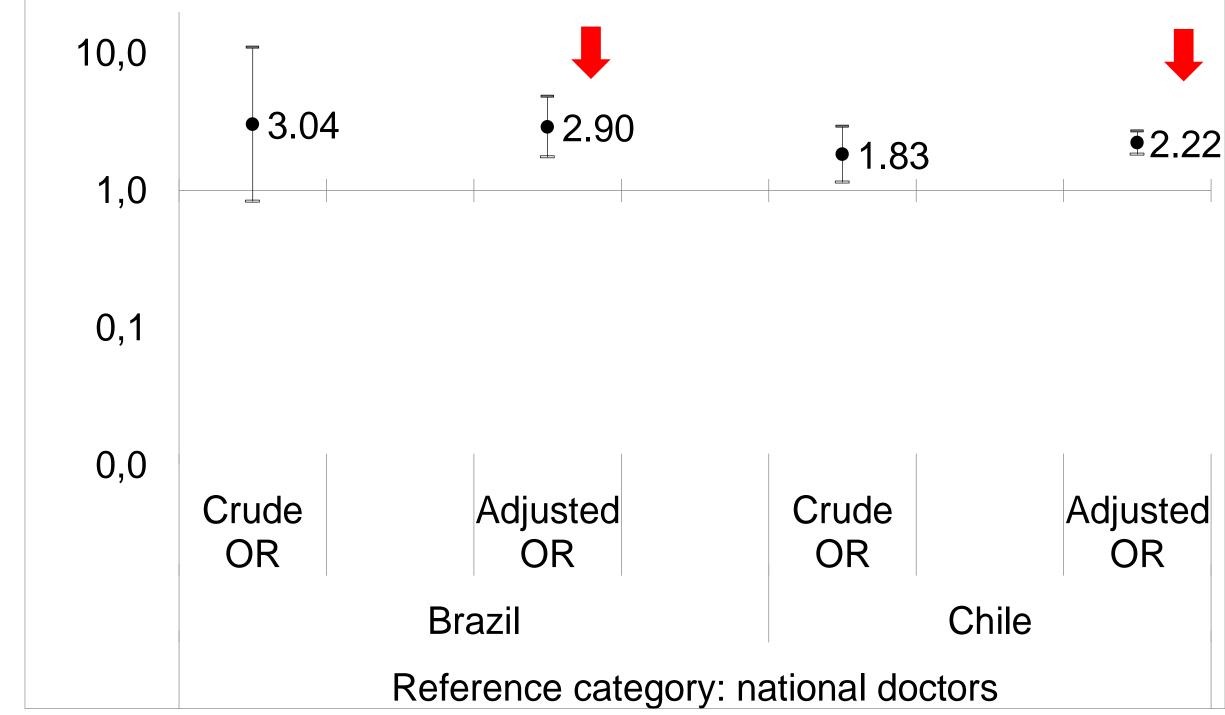
#### >> Variables

- Outcome: general perception of care coordination across care levels.
- Main explanatory variable: doctors' country of origin (national/foreigner).
- Covariates: sociodemographic, employment, organizational, and interactional factors.
- >> Data analyses: Descriptive analysis and multivariable logistic regression models

#### **RESULTS**

| Sample characteristics          | Brazil (n=381) |               | Chile (n=348) |           |
|---------------------------------|----------------|---------------|---------------|-----------|
|                                 | National       | Foreigner     | National      | Foreigner |
|                                 | n (%)          | n (%)         | n (%)         | n (%)     |
|                                 | 354 (92.9)     | 27 (7.1)      | 262 (75.3)    | 86 (24.7) |
| Main countries of origin (fre   | equency >6%    | %)            |               |           |
| Cuba                            |                | 23 (85.2)     |               | 11 (12.8) |
| Ecuador                         |                |               |               | 39 (45.3) |
| Colombia                        |                |               |               | 8 (9.3)   |
| Bolivia                         |                |               |               | 8 (9.3)   |
| Sex                             |                |               |               |           |
| Male                            | 151 (42.7)     | 10 (37.0)     | 140 (53.4)    | 42 (48.8) |
| Female                          | 203 (57.3)     | 17 (63.0)     | 122 (46.6)    | 44 (51.2) |
| Age                             |                | ,             |               | ,         |
| <35                             | 101 (28.9)     | 3 (11.1)      | 117 (44.7)    | 16 (18.6) |
| 36-50                           | 136 (38.9)     | 19 (70.4)     | 80 (30.5)     | 46 (53.5) |
| > 50                            | 113 (32.3)     | 5 (18.5)      | 65 (24.8)     | 24 (27.9) |
| Care level                      |                |               |               |           |
| Primary care                    | 84 (23.7)      | 25 (92.6)     | 82 (31.3)     | 59 (68.6) |
| Secondary care                  | 270 (76.3)     | 2 (7.4)       | 180 (68.7)    | 27 (31.4) |
| Years working in the centre     | e / workplace  | )             |               |           |
| Less than 1 year                | 69 (19.5)      | 4 (14.8)      | 87 (33.2)     | 30 (34.9) |
| From 1 to 3 years               | 90 (25.4)      | 22 (81.5)     | 47 (17.9)     | 14 (16.3) |
| More than 3 years               | 195 (55.1)     | 1 (3.7)       | 128 (48.9)    | 42 (48.8) |
| Contracted hours per week       |                |               |               |           |
| < 20h                           | 164 (46.3)     | 1 (3.7)       | 31 (11.8)     | 3 (3.5)   |
| 20-40h                          | 164 (46.3)     | 23 (85.2)     | 140 (53.4)    | 33 (38.4) |
| > 40h                           | 26 (7.3)       | 3 (11.1)      | 91 (34.7)     | 50 (58.1) |
| Patients per hour               |                |               |               |           |
| <=3                             | 62 (17.6)      | 12 (44.4)     | 84 (32.3)     | 11 (12.8) |
| 4-5                             | 153 (43.3)     | 14 (51.9)     | 152 (58.5)    | 71 (82.6) |
| >5                              | 138 (39.1)     | 1 (3.7)       | 24 (9.2)      | 4 (4.7)   |
| Knows doctors of the other      | care level*    |               |               |           |
| Yes                             | 41 (12.5)      | 1 (4.0)       | 24 (9.4)      | 9 (11.1)  |
| Trusts in the clinical skills o | of doctors of  | the other cal | re level*     |           |
| Yes                             | 174 (51.6)     | 23 (85.2)     | 118 (46.1)    | 64 (75.3) |
| Receives referral/reply lette   | ers*           |               |               | , , ,     |
| Yes                             | 126 (61.2)     | 20 (87.0)     | 84 (32.3)     | 43 (50.6) |

# Relationship between perception of high coordination of care across levels and doctor's country of origin (crude and adjusted odds ratios [OR] and 95% confidence intervals)



Models also adjusted by: care level, years working in the centre, hours per week, patients per hour, knows doctors of other care level, trusts in clinical skills of doctors of other care level, receives referral or reply letters

# DISCUSSION

- >> First exploratory analysis comparing doctors' perception of care coordination according to country of origin in Brazil and Chile.
- >> Low perception of care coordination across levels but slightly higher among foreign doctors.

# Possible explanations to be explored:

- the influence of differences between the health care systems in the origin and receiving country in the foreign doctors' opinions;
- care level in which doctors are working (differences between Brazil and Chile); and
- differences in interactional factors (higher identification of the PC doctor as coordinator of patient care, or higher trust in clinical skills of doctors of the other care level than national doctors) and job-related attitudes.

# CONCLUSIONS

- >> The level of perceived care coordination is generally low but somewhat better among foreign doctors.
- >> Further research on influencing factors is needed.

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General perception of care coordination across levels of care **Brazil** (n=381) Chile (n=348) **National** National Foreigner Foreigner n (%) n (%) n (%) n (%) 354 (92.9) 27 (7.1) 262 (75.3) 86 (24.7) Perception of care coordination\*\*\* 27 (10.3) 15 (17.4) 4 (14.8) High 19 (5.4) 332 (94.6) 23 (85.2) 234 (89.7) 71 (82.6) Low

<sup>\*\*\*</sup> High: always or very often. Low: sometimes, rarely or never.