

Patient Perspectives on a Low Back Pain App: A Secondary Analysis of a Randomized Controlled Trial

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BACKGROUND

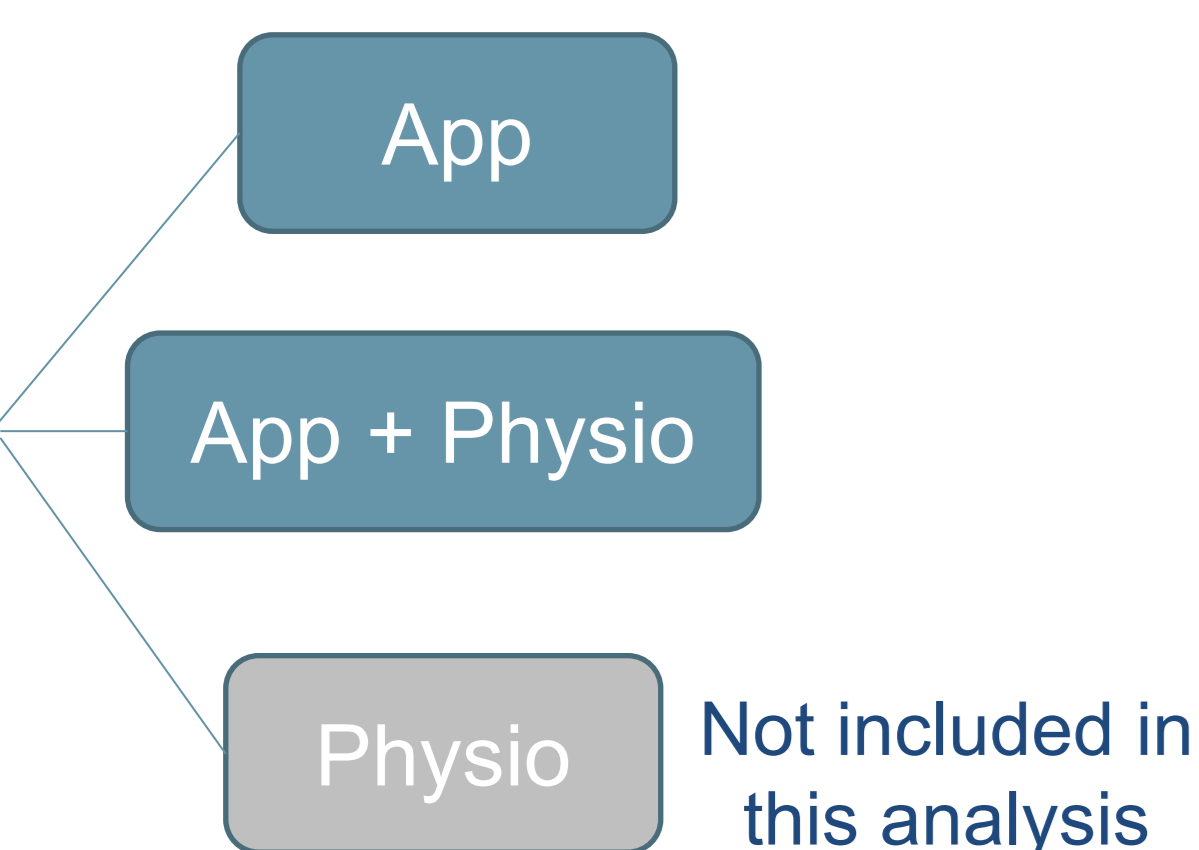
- Low back pain (LBP) is the leading cause of disability globally [1], resulting in significant healthcare costs [2].
- Telemedicine is a rapidly growing alternative to conventional physiotherapy and offers advantages such as reduced travel times [3], enhanced time flexibility [4], and self-management [5].
- Evidence supports similar effectiveness in improving pain and physical function compared to conventional in-person care for LBP [6,7], but usability is a critical barrier to practical implementation and can negatively affect compliance [8].

AIM

- Evaluating the usability of the 'NOLA' app, which integrates exercise and education for LBP
- Examining patient perspectives on telemedicine, motivation, and app usage

METHODS

- Pre-planned secondary analysis of a three-arm randomized trial (DRKS00029099)
- Individuals with LBP for at least six weeks



- Outcomes: Baseline characteristics, System Usability Scale, Telemedicine Perception Questionnaire, motivation, app usage

RESULTS

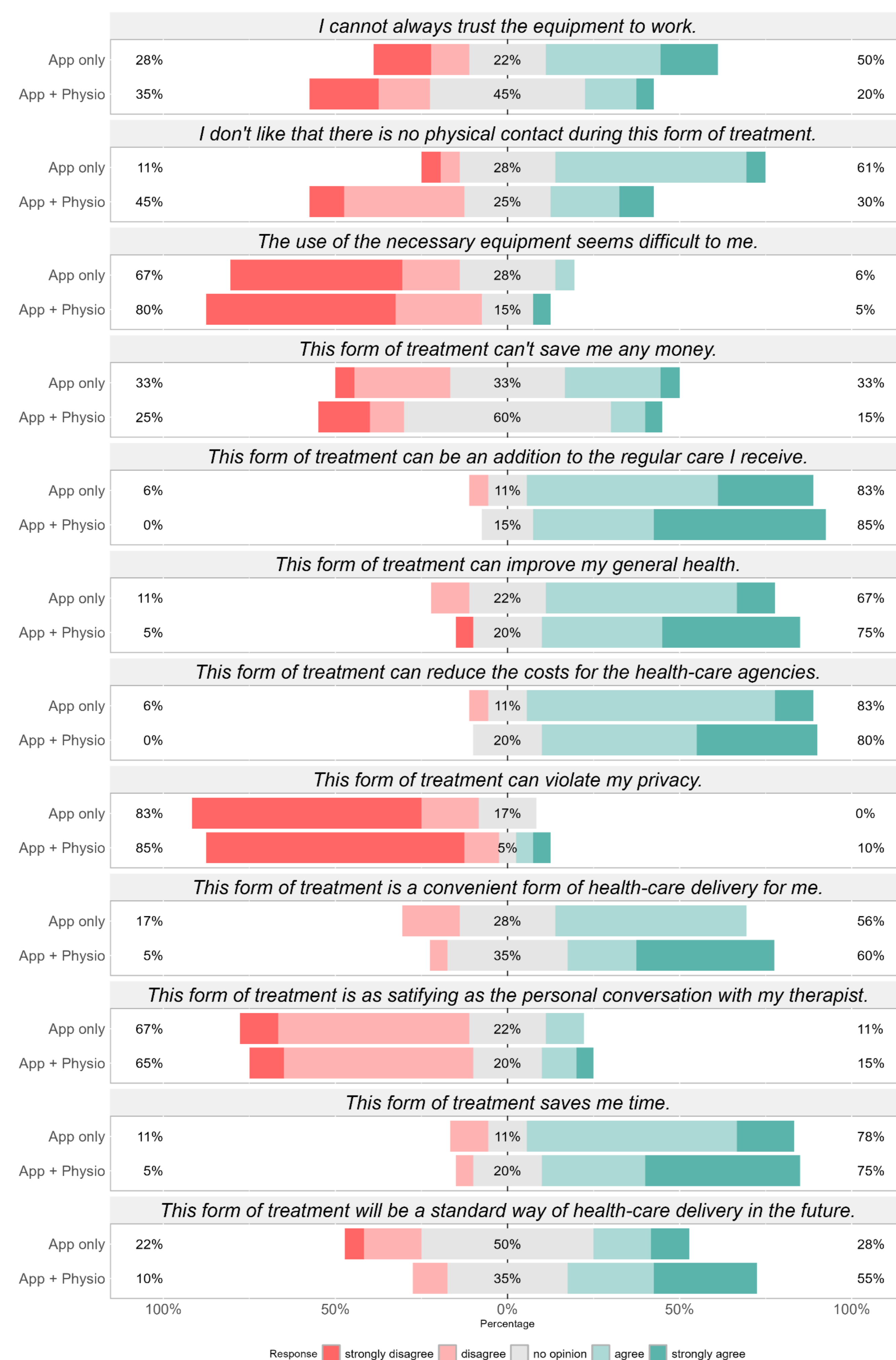


Fig. 1: Percentage of answers in the Telemedicine Perception Questionnaire per group

	App (N = 18)	App + Physio (N = 20)
Age, Mean (SD)	51.8 (13.6)	48.1 (13.2)
System Usability Scale (0-100), Median (Range)	77.5 (58.1 – 91.9)	86.3 (65 – 90.6)
Motivation to train with the app, n/N (%)	11/18 (61%)	14/20 (70%)
App usage, n/N (%)		
< 2 days/week	3/18 (17%)	3/20 (15%)
2 days/week	5/18 (27%)	2/20 (10%)
3-5 days/week	7/18 (39%)	9/20 (45%)
nearly every day	3/18 (17%)	6/20 (30%)

Table 1: Outcomes per group

Variable	Drop Outs (N = 26)	Completers (N = 38)	P-value ^a
Age, Mean (SD)	52.9 (12.0)	49.9 (13.5)	.35
Pain Intensity ^b , Mean (SD)	3.0 (2.0)	3.9 (2.0)	.02
Disability ^c , Mean (SD)	19.0 (9.4)	24.6 (9.6)	.09

Table 2: Comparison of baseline characteristics: participants who dropped out vs. completed, ^a Wilcoxon Rank Sum Test, ^b Numeric Rating Scale (0-10), ^c Oswestry Disability Index (0-32)

CONCLUSION

- Patient perceptions of telemedicine were in general positive.
- The app 'NOLA' showed good usability and was used regularly.
- Despite concerns about the lack of physical contact, participants recognized telemedicine as a convenient addition to usual care.
- Well-designed apps can improve patient engagement and satisfaction in individuals with LBP.



Future research
→ Patients' perceptions regarding different delivery pathways like apps, websites or videoconferencing to obtain knowledge about preferences regarding specific forms of treatment

REFERENCES

