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Physiotherapists' experiences of direct access for clients with musculoskeletal pain and dysfunction: a qualitative study

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ABSTRACT

Aims

This study focused on direct access-practice in physiotherapy by surveying the experiences of physiotherapists who work in direct access with clients having musculoskeletal pain or dysfunction.

Methods

This was a descriptive, mixed method study where data were collected from questionnaires given to 34 physiotherapists, 18 of them being in direct access for 6 years and 16 for 6 months. There were 15 structured questions and 3 open-ended ones. The answers were analysed with quantitative and qualitative methods.

Results

The data analysis of the open-ended questions showed that physiotherapists had positive experiences of direct access. This practice brought meaningfulness and self-respect to physiotherapists' work. Meaningfulness was interpreted as being constructed from a *client perspective*, a *work perspective* and a *working community perspective*.

Conclusions

This study provided valuable insight from the physiotherapists' experiences of direct access practice. The main result was the experience of the meaningfulness of the work. This was connected to clients' satisfaction with being in the right place at the right time, to the experience of their own competence, and to good cooperation with other health professionals. From the physiotherapists' point of view, direct access seems to function well but needs commitment by the whole work community to the new practice.

Keywords

direct access, physiotherapy, musculo-skeletal disorders, meaningfulness of work, content analysis

Physiotherapists' experiences of direct access for clients with musculoskeletal pain and dysfunction: a descriptive, mixed-method study

Introduction

In Finland direct access (also known as extended scope of practice) to physiotherapy is a practice where musculoskeletal clients can utilise physiotherapy services without a referral from a medical doctor [1,2]. In direct access practice the emphasis is on freedom of choice for therapy location, fast access to service, faster recovery and lower health care costs [3-6]. Direct access has been conducted in health care centres around Finland for two decades, including reports and studies about the practice [4,7-10]. According to these studies, health care professionals and clients have been satisfied with the practice. There is also research on the transition of the content of continuing education to direct access practice [11] as well as on the clinical reasoning and reflection on action of the physiotherapists in the clinical evaluation of clients [12].

The autonomy of the physiotherapy profession enables clients to access physiotherapy services directly (the law on health care professionals in Finland). However, the practice in health care centres has traditionally required a referral from a physician. It is the physician, therefore, who often decides if a client requires a visit to a physiotherapist. This practice may lead to long waiting times for appointments with a physician and, once there, clients are often given only a prescription for medication and sick leave [8]. In majority of cases, only after prolonged pain or pain becoming chronic were clients referred to further examination or physical therapy [8]. Ylinen and Nikander state that physicians should do the work they have been educated, and clients with musculo-skeletal disorders should be referred direct to physiotherapist [8]. Clients have been able to access physiotherapy directly in the private sector, but without a referral they do not qualify for reimbursement of the benefits. The practice of direct access is consistent with the impending renewal of the social and health care system in Finland, where the goal is for clients to be in the right place at the right time [9]. Direct access to physiotherapy enables clients to receive the correct clinical evaluation and treatment as well as guidance in pain relief and prevention for their musculoskeletal disorder at an early stage (= < 3 months). This should also reduce the workload in special health care as well as unnecessary imaging and surgery [13]. Sick leave days may also be reduced through direct access practice [5]. In addition, direct access follows the national treatment recommendations for musculoskeletal disorders [13].

Direct access has produced some encouraging results in cost benefit and client satisfaction [6,14-18]. In their systematic review, Ojha et al. [14] concluded that the cost benefit for health care was likely the smaller amount of imaging and medication prescribed by physiotherapists than by physicians. Related results have also been found in Scotland [16-17], and United Kingdom [18]. According to Boissonnault and Lovely, respondents representing direct access organisations reported more timely access to physiotherapy services, enhanced client satisfaction, decreased organizational health care costs, and improved efficiency of resource utilization as benefits of implementing a direct access model [18]. From the cost-benefit point of view, the results of Karvonen et al. showed the low need for repeat visits to a physiotherapist or a physician, and low rates of absence due to sickness, which suggests those results are notable [5]. Similar results for fewer sick leaves and faster return to work have also been found in studies by Ojha [14] and Addley [19]. From the client perspective, good results have also been reported for client satisfaction due to quick referral to a physiotherapist and fewer visits needed because of the health issue [14, 17-22]. Regarding client safety in direct access, Mintken et al. reported that over a 10-year period of data collection in which 12,976 patients accessed physiotherapy without referral, there were no reported cases of serious medical pathology or adverse events [23]. Some studies have examined direct access from the perspective of health care professionals, with the results of these showing an increase in work satisfaction [4,7,9,10]. Yet to date there have been no academic studies conducted in Finland focusing only on physiotherapists' experiences of direct access. To address this gap, this study was conducted to learn more about physiotherapists' experiences of this practice.

Background of this study

Continuing education programme for direct access

The post graduate education program for physiotherapists in direct access practice was carried out in Finland. The aims of direct access have been established according to clinical guidelines for early intervention to prevent recurrence of pain and its becoming chronic [13], as well according to the recommendations for direct access education to physiotherapists [2]. The content of the programme was focused on clients with low back pain (LBP) and dysfunctions, as well as on clients with all other musculoskeletal disorders (MSD). The programme aims were established to supplement physiotherapists' qualifications after professional certification. Two years of practical experience with MSD clients was required for participation. The length of the programme

(minimum 15 credits) and, the qualification of teachers has been defined in the guidelines for direct access education for physiotherapists [2].

The aims of the continuing education programme were as follows:

1. To develop clinical assessment skills including assessment of marks of red flags and psychosocial stress factors (indicating a need for consultation with a physician or other health care professionals)
2. To develop clinical reasoning and critical reflection skills
3. To develop knowledge of pain mechanisms and pain classifications
4. To develop interaction and guidance skills to support client`s self-management with their pain and dysfunction
5. To develop skills to assess clients` needs for sick leave and medication
6. To support early recovery of functioning and early return to work

The programme included final assessment of learning through final theoretical and practical exams [2].

Before starting the direct access in health care clinics, the other health care professionals were informed and trained in the new procedures. A crucial aspect was instructions for the triage nurse on assessing the need for care by means differentiating red flags in order to determine which of the clients would potentially need an appointment with a physician (13).

Aims of this study were to find out

1. What are the most general client groups in physiotherapists` direct access?
2. What are the needs for consultation with a physician or other health care professionals?
3. What are physiotherapists` experiences of direct access?

Methods

Participants

Four large municipal health care organisations in Finland were requested to participate in this study. Physiotherapists from all health care organisations had previously participated in the same continuing education programme of direct access and had started the practice. Two of these health care organisations indicated their willingness and possibilities to participate. Group A consisted of 18 physiotherapists from different clinics of one health care organisation, and group B

included 16 volunteers from another. Because the length of experience with direct access differed between these groups from eight years (group A) to a few months (group B), this difference was accounted for in the data analysis. Group A was called Experts and group B was named Beginners.

Data collection

The data were collected with a questionnaire. The follow-up questionnaire was designed by the authors in this study. The questionnaire consisted of 15 questions. The first 12 were structured questions about the background of the physiotherapists, demographic details and general information about the client groups and the administrative organisation of direct access at the physiotherapists' work places. The last three open-ended questions focused on the main aim of this study, namely, on physiotherapists' experiences with utilising direct access practice in their work. The open-ended questions were as follows: 1. What are your experiences of direct access? 2. What are your experiences of how clients are referred to you in direct access? 3. What suggestions do you have for developing clients' direct access to physiotherapy? (see Appendix)

This follow-up questionnaire was sent to the heads of physiotherapy clinics, who then forwarded the questionnaires to the physiotherapists (N=34).

Ethical consideration

The study was ethically approved by the CEOs of X Health Care Centres (8 February 2012, 16 April 2018, 23 April 2018, 4 May 2018)

Data analysis

For the structured questions, statistical analysis of the material was carried out using SPSS statistical software. In the case of two groups the corresponding nonparametric test (Mann-Whitney) was used. The grading scale variables were tested with crosstabulation and a chi-square independence test and confirmed with Fischer's exact test. For all comparisons, a probability of <0.05 was considered statistically significant (2-tailed), [24,25].

Qualitative method was applied when analysing physiotherapists' experiences. The data was analysed by applying inductive interpretive content analysis, as defined by Graneheim and Lundman [26]. Answers to the two first open questions were combined for analysis, and the third

one was analysed separately. First, the first two authors separately completed the initial analysis phase by reading the texts carefully in order to identify themes. Then the authors focused on the similarities and differences in the texts, where each content-related theme was marked and combined into the same sub-category. This phase was conducted separately by each author. Next, the authors discussed their categorisations. When there were difficulties in categorisation or interpretation, the authors made a further assessment to determine the final place within the subcategories. Then, by analysing the subcategories, the main category was formulated together. Figure 1 describes the five steps of qualitative content analysis and Figure 2 describes the data categorizing of open-ended questions.

RESULTS

There were no statistical differences in the size and gender distribution of the groups A and B. There were also no differences in the years of working as physiotherapists. Physiotherapists (Experienced) in a municipal health care organisation A had carried out direct access for an average of six years, while physiotherapists (Beginners) in an organisation B averaged six months. Table 1. The demographics of participants. Table 2. presents the results for the questions 6-12 questions, including the statistical differences between Experienced and Beginners

Client groups

The most typical client group in direct access was one with low back pain, followed by upper limb among Experienced and neck pain among Beginners. According to the duration of pain, the groups were in acute and sub-acute pain. The number of weekly clients among 83% of the Experienced ranged from 10 to 20, while 17% of the group had more than 20 clients. All Beginners, except one, saw less than 10 direct access clients a week.

Consultation with a physician or other health care professionals

According to the results, both physiotherapy groups had a good possibility to consult with a physician. The most common cause for contacting a physician was checking medication, and the next most common was unexplained pain or a suspicion of red flags. Those in the Experienced group had a possibility to prescribe three to five days of sick leave if needed, but this procedure was not yet in use with the Beginners. Consultation with other health care specialists was relatively low. In the previous month, the Experienced had consulted nine times psychologist, four times social nurse or nurse, and eight times their own colleagues. In comparison, Beginners had consulted their own colleagues twice.

Physiotherapists' experiences of direct access practice

Physiotherapists described their experiences of direct access practice from the perspective of their clients, their work and the work community. In relation to these, they emphasised the meaningfulness of their work.

Client perspective

The main objectives of direct access are to ensure that a client has rapid access to physiotherapy, the identification of the causes of musculoskeletal problems, the control of pain and the prevention of its recurrence and chronicity. According to the data, it was client's satisfaction and the benefit for the client the physiotherapists felt they achieved in direct access practice. The following extract from the data presents how physiotherapists described the client perspective in their texts:

My experience of direct access is good – I can influence the development of my client's situation at the right time, feedback is positive. The best target group is acute or subacute discomfort/clients. PT A3.

I very much like this approach – I have been able to help clients comprehensively, clients are satisfied. PT A8.

The work is meaningful and rewarding – client feedback is positive. Your activity is rewarded. PT A4.

The work perspective

Direct access seemed to bring positive challenges and changes to physiotherapists' work, as the following extracts show:

Direct access has brought the desired challenge and change to the image of the work and has added meaning to the work. PT B10.

Experiences are positive. A clear change to the previous working method – my work is now more systematic. It is motivating to get a client with pain at an early stage, then I am able to influence it. PT B7

By implementing direct access, physiotherapists have had a chance to improve their knowledge and skills, which has influenced their work satisfaction. At the same time, they also experienced an increase in the valuation and professional self-esteem of their work, which can be seen in the following extract:

Continuing education for direct access has brought new tools to work – more quality, effectiveness and efficiency. Professional pride and appreciation have grown. PT B5

The maintenance and development of knowledge is emphasised by the importance of regularly updated training, as well as a systematic orientation programme for new staff on the direct access procedure.

Working community perspective

In terms of working effectively, direct access requires smooth multi-professional collaboration. In the third identified sub-category, co-operation with the nurse working in reception was emphasised alongside good co-operation with other health care professionals. The nurse in the reception assesses which clients can go directly to physiotherapy and who requires a visit to the physician. Physiotherapists' possibility for consultation with a physician contributes to a rapid review of the need for further examinations (e.g. possible red flags):

The experience of referring clients to the right place is positive and consultation with the physician works well. PT B6.

Further analysis of the data revealed the connection between the main category and three subcategories: the client perspective, the work perspective and the working community perspective. This main category was named *meaningfulness of work*. The meaningfulness of work in direct access was found from 26 utterances in the data and it was described in each respondent's text. Figure 3 summarises the results of the physiotherapists' experiences of direct access practice.

Figure 3. Summarised results of physiotherapists' experiences of direct access practice.

When analysing the answers to third of open-ended questions, regarding suggestions to develop direct access physiotherapy, there was a common need to regularly update knowledge and competences with new evidence and to ensure new staff's knowledge and commitment to direct access practice.

When assessing potential differences between the Experienced and Beginners groups, differences in the assessment of their own skills and visit time were highlighted. Experience increased the fluidity and certainty of the Experienced group, while Beginners still felt some uncertainty and reported insufficient visit time.

Discussion

This study focused on physiotherapists' experiences of direct access for clients with musculoskeletal pain and dysfunction. Thirty-four physiotherapists who had participated in a continuing education programme and had experience with direct access completed a questionnaire consisting of structured and open-ended questions. There were no significant differences between the Experienced and the Beginners regarding the length of their career in physiotherapy, with all working in the field for almost 20 years. However, significant differences existed in the amount years of specialisation in direct access, with the Experienced having six more years of experience in this field. One significant difference was found in the amount of client visits. Of the Experienced, 95% had more than 10 direct access clients a week, while with the Beginners, 94% of them had less than 10 direct access clients a week. Differences between the Experienced and Beginners can be explained by the different length of implementation time of the new practice.

According to the results, the most common clients in both physiotherapist groups were LBP clients in the acute or subacute phase of pain. To ensure the quality of direct access implementation, the physiotherapists were given the possibility for a quick consultation with a physician. The results showed that this possibility was organised well, even if it was needed in a few cases only. The main reason for consultation was to review a client's medication and, on a few occasions, the presence of a serious illness or the need for additional sick leave, which were beyond the physiotherapists' right to recommend. Among the Experienced group there was more consultation with other health practitioners, such as a psychologist or social nurse, than there was among the Beginners. This difference can be explained by either the short implementation time of the new practice or better possibilities for consultation in organisation A.

Mottfatt et al. studied the implementation of new knowledge in practice and emphasised the need for extra effort when assessing implementation. Without guidance and support, it is easy for the new practice to be marginalised before it is deeply absorbed into everyday practice [27].

Kangas et al. highlighted the importance of the whole working community's commitment to the

new practice [9]. The same argument was present in participants' answers in their suggestions for the future.

The meaningfulness of work

The study showed that direct access practice brought meaningfulness and self-respect to physiotherapists' work. Furthermore, according to the study, the meaningfulness was constructed from three perspectives: client, work and working community. Keles defines the meaningfulness of work as the importance of work in people's view of life and attitudes but also as taking pleasure and satisfaction in work [28]. In the present study, the meaningfulness of the physiotherapists' work was found in clients' satisfaction with direct access as well as with the experience of success and skilfulness in their work. From the work community perspective, important aspects were quick referral to physiotherapy and a possibility for consultation with a physician. Similar experiences have also been noted in studies by Kangas, Holdsworth and Boissonault [9,17,18]. From the client perspective, the importance of quick referral to physiotherapy was highlighted while clients' satisfaction was related to physiotherapists' work. Piano [6] expresses the increase of quality of physiotherapy and clients' quicker return to work with direct access. Kangas [9] clarified the effects of direct access from the working community's perspective. The study showed that the meaningfulness of work increased when the competence and cooperation of professional groups were utilised.

From the perspective of physiotherapists' skills and competences, it is important to note how physiotherapists valued the skills they acquired during the education programme for direct access practice. The physiotherapists expressed these benefits in, for example, the following ways: "new knowledge brought more self-confidence" or "the work is now more systematic" or "better verification of client's examination and conclusions".

However, it must be noted that the principles of direct access may differ between Finland and other countries. In Finland, continuing education program for direct access has been offered to ensure uniform practice and clear principles for the distribution of work between health care professionals. This makes study results in Finland more comparable than results from other countries where direct access has not been implemented as systematically, particularly in physiotherapy content.

Strengths and limitations of this study

Credibility, dependability and transferability are, according to Lincoln and Guba aspects of trustworthiness that strengthen qualitative studies [29]. In this study, credibility was demonstrated by providing information on data collection strategies and analysis technique, and by presenting relevant quotations. Dependability was strengthened by using two researchers to analyse the data separately and to identify subcategories and the main category (Figures 1-2). Although the findings of qualitative studies cannot be generalised, they can be transferred to provide increased understanding of similar situations based on the study setting and the information provided by the participants.

The evaluation of the reliability of the quantitative portion of the present study concerns the first 12 questions of the questionnaire. The results are mainly descriptive even if the differences between the two groups were determined statistically. These questions were primarily used to obtain information about the basic details regarding direct access practice. When the final study sample provided an opportunity to compare possible differences between Experienced and Beginners, this was also taken into account when analysing the data.

Development suggestions for further study

Those physiotherapists who had practiced direct access for a shorter time (Beginners) pointed to the need for longer appointment times (up to 60 minutes) with their client in order to properly implement the new practice. Both groups indicated the importance of a quick consultation with a physician if needed. Both groups also emphasised the importance of regular continuing education about new knowledge and discussions about experiences. A crucial topic in physiotherapists' comments was continual communication about and familiarity with direct access practice in order to strengthen the commitment of health care professionals to direct access practice.

Conclusions

This study provided valuable insight on direct access from the perspective of physiotherapists. Direct access seemed to give more meaning to physiotherapists' work. In particular, the meaningfulness of their work was found to be connected to their clients' satisfaction of being in the right place at the right time. Meaningfulness also consisted of physiotherapists' experience of their own competence and of good cooperation with other health care professionals.

Further research is still needed, however. Future studies should use a larger sample and examine the adequacy of continuing education, the effectiveness of direct access in reducing chronic pain in musculoskeletal disorders as the main aim of direct access, and the cost-effectiveness from the perspective of the client as well as of the health care community.

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Reference list

- [1]. Direct access and patient self-referral. WCPT. 2016; www.wcpt.org/node/34062.
- [2]. Suomen Fysioterapeutit ry, Suomen Fysiatriryhdistys ry. Suositus fysioterapeutin tule-suoravastaanottokoulutuksesta. (Finish Physiotherapy Association: recommendation for direct access education to physiotherapists in musculoskeletal disorders). 2017.
- [3]. Swinkels I, Kooijman M, Spreeuwenberg P, et al. An Overview of 5 Years of Patient Self-Referral for Physical Therapy in the Netherlands. *Physical Therapy*. 2014;94(12):1785-1795.
- [4]. Lautamäki L, Salo P, Mustalampi S, et al. Fysioterapian suoravastaanotto. *Suomen Lääkärilehti*. (Physiotherapists` direct access). *Finnish Medical Journal*. 2016;71(4);1773-1777.
- [5]. Karvonen E, Paatelma M, Heinonen A. Asiakkaan kokemuksia fysioterapeutin suoravastaanotosta selkäkipujen varhaisvaiheessa. (Patients` experiences of their visits to direct access physiotherapist in the early phase of low back pain: A retrospective, descriptive survey). *Kuntoutus*. 2017;40(3-4):34-44.
- [6]. Piano L, Maselli F, Viceconti A, et al. Direct access to physical therapy for the patient with musculoskeletal disorders, a literature review. *The Society of Physical Therapy Science*. 2017;29(8):1463-1471.
- [7]. Kukka A. Selvitys fysioterapeuttien laajennetuista tehtävänkuvista ja työnsiirroista kansainvälisesti ja Suomessa. (Direct access to physiotherapists – productivity and meaningful

work through the division of labour?). Suomen Fysioterapeutit, Finish Physiotherapy Association: 2010.

[8]. Ylinen J, Nikander R. Terveystenhuollon epätasa-arvo näkyy kuntouksessa. (Health inequalities are reflected in rehabilitation. Finnish Medical Journal). Suomen Lääkärilehti. 2014;69(39):2429.

[9]. Kangas H. Trust and social division of labour between experts in public healthcare. A phenomenographic case study of physiotherapists' and general practitioners' views of trust and the division of labour in two municipal organizations. Doctoral dissertation. University of Eastern Finland, 2017.

[10]. Kylänen M, Vuori J, Kangas H, et al. Direct access to physiotherapists - productivity and meaningful work through the division of labour. Linear and nonlinear service processes are defined by the work of physiotherapists and physicians). The TSR final report Granö. Kuopio. 2015.

[11]. Karvonen E, Paatelma M, Kesonen J, et al. Knowledge translation from continuing education to physiotherapy practice in classifying patients with low back pain. Journal of Manual and Manipulative Therapy. 2014;23(2):68-74.

[12]. Karvonen E, Paatelma M, Laitinen-Väänänen S, et al. Clinical reasoning and critical reflection in physiotherapists' examinations of patients with low back pain in its early phase: a qualitative study from physiotherapists' point of view. European J of Physiotherapy. 2017;25(2):68-74.

[13]. Pohjolainen T, Leinonen V, Frantzen J, et al. Suomalainen käypähoito-suositus, alaselkä. (Finnish Guidelines for low back pain). Duodecim. 2017.

[14]. Ojha H, Snyder R, Davenport R. Direct access compared with referred physical therapy episodes of care: a systematic review. Physical Therapy. 2014;94(1):14-30.

[15]. Bury T, Stokes E. (I). A global view of direct access and patient self-referral to physical therapy: implications for the profession. Physical Therapy. 2013;93(4):449-459.

[16]. Webster V, Holdsworth L, McFadyen A, Little H. Self-referral and physiotherapy-patients knowledge and attitudes-results of a national trial. Physiotherapy 2008;94(2):141-149.

[17]. Holdsworth L, Webster V, McFadyen A. What are the costs to NHS Scotland of self-referral to physiotherapy? Results of a national trial. Physiotherapy 2007;93(1):3-11.

[18]. Boissonault W, Lovely K. Hospital-Based Outpatient Direct Access to Physical Therapist Services: Current Status in Wisconsin. Physical Therapy. 2017;96(11):1695-1704.

[19]. Addley K, Burke C, McQuillan P. Impact of a direct access occupational physiotherapy treatment service. Occupational Medicine. 2010;60(8):651-653.

[20]. Holdsworth L, Webster V. Direct access to physiotherapy in primary care: now? – and into the future? Physiotherapy. 2007;93(1):3-11.

- [21]. Holdsworth L, Webster V, McFadyen A. Are patients who refer themselves to physiotherapy different from those referred by GPs? Results of a national trial. *Physiotherapy*. 2006;92(1): 26-33.
- [22]. Leemrijse C, Swinkels I, Veenhof C. Direct Access to Physical Therapy in the Netherlands: Results From the First Year in Community-Based Physical Therapy. *Physical Therapy*. 2008;88(8):936-946.
- [23]. Mintken P, Pascoe S, Barsch A, et al. Direct Access to Physical Therapy Services Is Safe in a University Student Health Center Setting. *Journal of Allied Health*. 2015;44(3): 164-168.
- [24]. Hicks C. Research methods for clinical therapists. Applied project design and analysis (3rd ed.) Churchill Livingstone, Harcourt Publisher Limited 2000.
- [25]. Sim J, Wright C. Research in Health Care: Concepts, Design and Methods. Cheltenham: Stanley Thornes, 2000.
- [26]. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today*. 2004;24(2)105–12.
- [27]. Moffatt F, Goodwin R, Hendrick P. Physiotherapy-as-first-point-contact-service for patients with musculoskeletal complaints: understanding the challenges of implementation. *Prim Health Care Res Dev*. 2018;19(2):121-130.
- [28]. Keles H, Findikli M. The effect of the meaningfulness of work on job satisfaction, job stress and intention to leave. *Global Journal of Business, Economics and Management*, 2016;6(2)61-69.
- [29]. Lincoln Y, Cuba E. Naturalist inquiry. In book Tuomi J, Sarajärvi A, *Qualitative research and content analysis*. 2012:137-138.

Table 1. Demographic details of the respondents

| | Experienced (n=18) | Beginners (n=16) |
|---|--------------------|------------------|
| Gender (female/male) | 12/6 | 12/4 |
| Average years as PT (SD) | 20 (9.7) | 20 (9.4) |
| Average years working as PT in direct access (SD) | 5.7 (1.7) | 0.6 (1.1) |

Table 2. Results of structured questions 6-12

| | Experienced (n=18) | Beginners (n=16) | |
|--|--------------------|-------------------|---------|
| 6. Number of direct access clients in one week, mean, (min–max): | | | |
| | 24.6 (18–32) | 9.7 (6–13) | |
| less than 10 clients, % | 5 | 94 | |
| 11–20 clients, % | 78 | 6 | |
| more than 20 clients % | 17 | 0 | |
| ¹ χ^2 (df) = 26,491 | | | |
| 7. What musculo-skeletal disorders have been most at your reception? Most common, mean rank (mean, sd): | | | |
| low back | 17.94 (1.06, 0.2) | 17.00 (1.00, 0.0) | Z=-0.94 |
| neck | 20.94 (2.89, 0.8) | 13.63 (2.31, 0.6) | Z=-2.36 |
| upper limb | 12.97 (2.39, 0.7) | 22.59 (3.19, 0.7) | Z=-3.02 |
| lower limb | 18.39 (3.67, 0.6) | 16.50 (3.50, 0.7) | Z=-0.67 |
| ² Mann-Whitney U-test | | | |
| 8. Possibility to contact physician: | | | |
| by phone (%) | 100 | 81 | |
| face to face (%) | 78 | 44 | |
| ¹ χ^2 (df) = 3,702 | | | |
| 9. Duration of client's disorder, most common, mean rank (mean, sd): | | | |
| acute, less than 6 weeks (SD) | 18.33 (1.61, 0.8) | 16.56 (1.44, 0.6) | Z=-0.59 |
| subacute, 6–12 weeks (SD) | 16.58 (1.61, 0.5) | 18.53 (1.75, 0.6) | Z=-0.67 |
| chronic more than 1 year (SD) | 17.19 (2.78, 0.5) | 17.84 (2.81, 0.5) | Z=-0.30 |
| ² Mann-Whitney U-test | | | |
| 10. How many times have you contacted a physician during the last month? | | | |
| | 4.89 (4,0) | 1.88 (1.69) | |
| ¹ χ^2 (df) = 4,401 | | | |
| 11. Reason for contact | | | |
| red flags, rank (SD) | 11.69 (2.62, 1.3) | 9.21 (2.29, 0.9) | Z=-0.75 |
| unexplained pain, rank (SD) | 11.36 (2.29, 0.6) | 6.20 (1.60, 0.5) | Z=-1.98 |
| checking medication, rank (SD) | 14.20 (1.35, 0.8) | 14.95 (1.45, 0.8) | Z=-0.31 |
| Sick leave, rank (SD) | 6.50 (3.20, 0.9) | 10.00 (4.00, 0.0) | Z=-1.66 |
| ² Mann-Whitney U-test | | | |
| 12. Contact of other health care personnel (n): | | | calcu |
| psychologist | 9 | 0 | |
| nurse or social nurse | 4 | 2 | |
| nutritional therapist | 0 | 0 | |
| another physiotherapist | 8 | 1 | |

¹ χ^2 -test² Mann-Whitney U-test

* calculation not possible due to low number of subjects

Figure 1. The five steps of qualitative content analysis, adapted from Graneheim&Lundman (2014)

Figure 2. Data categorisation of open-ended questions

Figure 3. Summarised results about physiotherapists` experiences of their direct access practice