

June 2023

EVIDENCE-BASED PRACTICE PROFILE OF PHYSIOTHERAPIST IN INDONESIA: A DESCRIPTIVE STUDY

Condrowati Condrowati

Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta

Farahdina Bachtiar

Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta,
farahdinabachtiar@upnvj.ac.id

Purnamadyawati Purnamadyawati

Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta

Ailsa Nahda Ahnafa Amsah

Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta

Jihan Ari Utami

Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta

Follow this and additional works at: <https://scholarhub.ui.ac.id/jvi>

Recommended Citation

Condrowati, Condrowati; Bachtiar, Farahdina; Purnamadyawati, Purnamadyawati; Amsah, Ailsa Nahda Ahnafa; and Utami, Jihan Ari (2023) "EVIDENCE-BASED PRACTICE PROFILE OF PHYSIOTHERAPIST IN INDONESIA: A DESCRIPTIVE STUDY," *Jurnal Vokasi Indonesia*: Vol. 10: No. 1, Article 2.

Available at: <https://scholarhub.ui.ac.id/jvi/vol10/iss1/2>

This Article is brought to you for free and open access by the Vocational Education Program at UI Scholars Hub. It has been accepted for inclusion in Jurnal Vokasi Indonesia by an authorized editor of UI Scholars Hub.

EVIDENCE-BASED PRACTICE PROFILE OF PHYSIOTHERAPIST IN INDONESIA: A DESCRIPTIVE STUDY

Condrowati¹, Farahdina Bachtiar^{2*}, Purnamadyawati³, Ailsa Nahda Ahnafa Amsah⁴,
Jihan Ari Utami⁵

^{1,2,3,4,5}Physiotherapy Program, Faculty of Health Science, Universitas Pembangunan Nasional Veteran Jakarta
Corresponding Author's Email: farahdinabachtiar@upnvj.ac.id

ABSTRACT

Evidence-based practice (EBP) is a foundational element of a healthcare practitioner to support the clinical adjustment. Evidence-based physiotherapy is integrated between high-quality clinical research, patients' preferences, and clinical expertise. However, in Indonesia, evidence-based practice profiles in physiotherapy have not been explained by the previous study. The current study aimed to identify the evidence-based practice profiles of physiotherapists in Indonesia. The study was descriptive quantitative. The design study used was a cross-sectional study. The inclusion criteria were physiotherapists work in Indonesia, age no more 65 years old (≤ 65 years old), whereas the exclusion criteria were the physiotherapists who were not acting as a physiotherapist and refused to be a respondent. The evidence-based practice questionnaire was distributed by using Google Form. The questionnaire included 11 questions. Most of the physiotherapists attending the course or training were 110 participants (77.5%), joining as a member of physiotherapy organization with the percentage at 95.8%. Most physiotherapists also have specialization areas in the physiotherapy field in which the highest proportion is in musculoskeletal physiotherapy. The experiences of the physiotherapists who participated in the study showed the various years of work, the variation of the average hours of work, and the various numbers of patients treated each day. In addition, most of the physiotherapists read or reviewed the research articles around 2 to 5 articles each month. The study concluded that the physiotherapist's profiles in Indonesia in their evidence-based practice refer to personal knowledge, experiences, and scientific research. The physiotherapists in Indonesia were active to participate in any kind of personal improvement like attending the courses or training, joining as a member of physiotherapy organization. The thing that needs improvement of the physiotherapist is the awareness to consider the scientific research or literature to support their clinical decision when the physiotherapists care for the patients. The results of this study are expected to be a consideration source for physiotherapists and stakeholders in making policies regarding the implementation of evidence-based practice in Indonesia

Keywords: *evidence-based practice, physiotherapy, physiotherapist, profiles*

ABSTRAK

Praktik berbasis bukti adalah elemen dasar praktisi kesehatan untuk mendukung pengambilan keputusan klinis. Fisioterapi berbasis bukti merupakan integrasi antara penelitian klinis berkualitas tinggi, preferensi pasien, dan keahlian klinis. Namun, di Indonesia, profil praktik berbasis bukti dalam fisioterapi belum dijelaskan oleh penelitian sebelumnya. Tujuan dari penelitian ini adalah untuk mengidentifikasi profil fisioterapi praktik berbasis bukti dari fisioterapis di Indonesia. Penelitian ini bersifat deskriptif kuantitatif. Desain penelitian yang digunakan adalah *cross-sectional study*. Kriteria inklusi adalah fisioterapis bekerja di Indonesia, usia tidak lebih 65 tahun (≤ 65 tahun), sedangkan kriteria eksklusi adalah fisioterapis yang tidak aktif sebagai fisioterapis dan menolak menjadi responden. Kuesioner praktik berbasis bukti disebarakan dengan menggunakan *Google Form*. Kuesioner mencakup 11 pertanyaan. Sebagian besar fisioterapis yang mengikuti kursus atau pelatihan sebanyak 110 peserta (77,5%), bergabung sebagai anggota organisasi fisioterapi dengan persentase 95,8%. Sebagian besar fisioterapis juga memiliki spesialisasi bidang di bidang fisioterapi, dominannya pada fisioterapi muskuloskeletal. Pengalaman fisioterapis yang berpartisipasi dalam penelitian menunjukkan berbagai tahun kerja, variasi rata-rata jam kerja, dan berbagai jumlah pasien yang dirawat setiap hari. Selain itu, sebagian besar fisioterapis membaca artikel penelitian sekitar 2 sampai 5 artikel setiap bulannya. Hasil penelitian menyimpulkan bahwa profil fisioterapis di Indonesia dalam praktik berbasis bukti mereka mengacu pada pengetahuan pribadi, pengalaman, dan penelitian ilmiah. Para fisioterapis di Indonesia aktif untuk berpartisipasi dalam berbagai bentuk peningkatan pribadi seperti mengikuti kursus atau pelatihan, bergabung sebagai anggota organisasi fisioterapi. Hal yang perlu ditingkatkan dari fisioterapis adalah kesadaran untuk mempertimbangkan penelitian ilmiah atau literatur untuk mendukung keputusan klinis fisioterapis ketika melakukan intervensi kepada pasien. Hasil penelitian ini diharapkan dapat menjadi bahan pertimbangan bagi fisioterapis serta *stakeholder* dalam pengambilan kebijakan mengenai implementasi *evidence-based practice* di Indonesia

Kata kunci: praktik berbasis bukti, fisioterapi, fisioterapis, profil

INTRODUCTION

Evidence-based practice (EBP) is a foundational element of a healthcare practitioner to support the clinical adjustment. It is a form of integration of clinical expertise, patient values, and best research into decision-making processes for patient care (Lehane et al., 2019)(Nilsagrd & Lohse, 2010)(Campos, Beckenkamp, & Moseley, 2013). Based on the statement from David Sackett, one of the founders of evidence-based practice, evidence-based practice is the explicit and judicious use of current best evidence in deciding on the care of the individual patient (Moseley, Elkins, Van der Wees, & Pinheiro, 2020)(Cimoli, 2012). One of the health professions which apply evidence-based practice in patients care is physiotherapy.

In the practice of physiotherapy, three sources of evidence are scientific research, clinical expertise, and patient values form the basis for physiotherapists and patients to work together in determining the best physiotherapy services (Olsen et al., 2014). The evidence-based physiotherapy practice provides the best available literature to make decisions on promotion, prevention, diagnosis, and effective intervention, and plan of care in individuals or communities which concern promoting, maintaining or restoring functional movement (Cobo-Sevilla, de Oliveira-Ferreira, Moposita-Baño, Paredes-Sánchez, & Ramos-Guevara, 2019)(Yamato, Arora, Stevens, Elkins, & Moseley, 2018). If high-quality clinical research is not available, good practice should use sources of other information such as peers, practice guidelines, practical knowledge, and other low-quality research to inform action in practice (Ramírez-Vélez, Bagur-Calafat, Correa-Bautista, & Girabent-Farrés, 2015). The appropriate use of evidence about the effectiveness of various treatment strategies should result in clinicians selecting techniques known to be effective, and ultimately lead to improved patient outcomes (Iles & Davidson, 2008)(Perraton et al., 2017). Implementation of evidence-based practice is very important for physiotherapists in the scope of clinical services to provide the best service to patients.

However, in Indonesia, evidence-based practice profiles of physiotherapists have not been explained by the previous study. To the best of the author's knowledge, there is little research which are focus to address the fact of evidence-practice profiles of physiotherapists in Indonesia. Therefore, the current study aims to identify the evidence-based practice profiles of physiotherapists in Indonesia.

LITERATURE REVIEW

Evidence-based practice (EBP) is widely recognized as a foundational component of

healthcare professional education around the world. In addition, evidence-based practice (EBP) is a decision-making and practice strategy for clinicians. It combines the most up-to-date and best scientific information with therapeutic skill as well as a patient's own values and circumstances. (Lehane et al., 2019).

Evidence suggests that when health care providers use an evidence-based approach to clinical care, patient outcomes increase (Cimoli, 2012). In any clinical setting, implementing EBP entails five steps: (1) ask a clinical question; (2) obtain the best evidence; (3) appraise the evidence for validity; (4) apply the evidence with clinical skill and patient values, and (5) evaluate the process' efficacy. Various resources, including increased access to journals, evidence summaries, and systematic reviews, have been produced for allied health professionals such as physiotherapy to help with the integration of EBP into everyday clinical thinking and treatment decisions (Yahui & Swaminathan, 2017).

In physiotherapy, EBP is the use of the best available research to make judgments on promotion, prevention, diagnosis, and successful therapies, as well as a care plan for individuals or communities who wish to improve, maintain, or restore functional mobility. The American Physical Therapy Association (2017) recognizes three main components in achieving EBP in Physiotherapy: the best available evidence, professional knowledge, patient values. The best available scientific evidence is evidence obtained by methodical hypothesis testing. Professional knowledge is implicit and explicit knowledge that is had by physiotherapists through their experiences during caring for patients like the experiences in prevention, physiotherapy diagnosis, treatment, and prognosis. Patient values is the beliefs, preferences, expectations, and cultural identity that the patient brings to the therapy environment (Cobo-Sevilla et al., 2019).

Furthermore, the benefits of EBP in health services especially physiotherapy will enhance physiotherapists to engagement with both clinical findings and research. These can enhance the proficiency of physiotherapists' clinical practice and help prevent the misuse, overuse, and underuse of healthcare services (Scurlock-Evans, Upton, & Upton, 2014).

METHODOLOGY

The study was descriptive quantitative. The design study used was a cross-sectional study. Ethical approval for the study was granted by the Human Research Ethics Committee of Universitas Pembangunan Nasional Veteran Jakarta. The population was the physiotherapist in Indonesia,

then the sample was physiotherapists who filled the criteria and wanted to be the respondents. The sampling technique was purposive sampling with the inclusion and exclusion criteria. The inclusion criteria were physiotherapists working in Indonesia who were ≤ 65 years old. We excluded questionnaires from participants who were not working in Indonesia, those who stated that they did not deal with patients at the time of the study, and those who refused to participate.

A self-administered questionnaire was distributed to the participants by using Google Form. The questionnaire included 11 questions related to evidence-based practice. In addition, demographic and practice data were collected, including the age, gender, nationality, education degree, years of experience, area of specialty, work environment, and patient load of the participant, as well as their contribution to research. Questionnaire data were imported into SPSS Statistics. Data were checked for accuracy and cleaned.

RESULT AND DISCUSSION

A total of 142 participants were included in the study. All the participants work as a physiotherapist in Indonesia, as a practitioner, educator even both. The participant characteristics were shown in Table 1. Based on the distribution, the age of the participants ranged from 25 to more than 55 years old. The highest age group of the participants was between 23 and 34 years old with a percentage at 54.2%, following between 35 and 44 years old, between 45 and 55 years old, then more than 55 years old with a percentage at 24.6%, 12.7%, and 8.5%, respectively. On the gender distribution, the participants seem that the difference between male and female participants did not differ that much, even though more female participants than male participants with a percentage difference of 8%.

The two other characteristics that were also included in the study were the education and work concentration of the participants. In the education distribution, the two highest educations of participants were diploma degree and master degree in which they were almost similar with percentage 28.9% and 27.5%, respectively. Then, it is followed by a bachelor's degree and a bachelor's of applied science. However, the lack was in a doctoral degree, with a percentage at 2.1%. Furthermore, to get the detail of work concentration of the participants, the study provides a different kind of concentration such as practitioner, lecturer, and both (practitioner and lecturer). The study got that most of the participants work as a practitioner with a percentage at 76.1%, followed by both (practitioner and lecturer) and only

lecturer with the percentage at 16.9% and 7%, respectively.

The evidence-based practice profiles of the physiotherapist can be seen in Table 2. From the questions, the study categorized the profiles into personal knowledge improvement, the experience of physiotherapy, and the use of scientific evidence-based.

Firstly, the study investigated personal knowledge improvement included attending courses or training, joining a professional organization, and gaining specialization in physiotherapy. Based on the results, most of the participants attending the course or training were 110 participants (77.5%). Although, 32 participants (22.5%) did not join the course or the training. Furthermore, by gaining specialization in physiotherapy, 88 participants had expertise in physiotherapy specialization. In detail, the participants tend to be experts was the musculoskeletal area, with percentages at 26.1%. The second and third places were pediatric and neurology, with a percentage at 18.3% and 5.6%, respectively. Then, some areas like cardio respiration, geriatric, sport, ergonomic, integument, and MLDV did not have that much expertise in which it showed with the percentage of less than 5% in these areas. Then, the participants who had the general physiotherapy skills were 51 participants with a percentage of 35.9%.

Secondly, the study described and got information about the physiotherapy experience of the participants. All the participants who have worked as physiotherapists were a variation of years, starting from two years to more than 20 years. The highest percentage has had the participants that have worked more than 20 years, with a percentage at 23.2%. It was followed by the participants working more than 10 years, 2 to 5 years, and more than five years, with percentages at 22.5%, 21.8%, and 17.6%, respectively. The lowest percentage of the participants who had experience ranged more than 15 years (14.8%). In the work duration on weeks, the participants mostly work more than 40 hours/week and 30 to 40 hours/week, with the percentage of the participants at 38.7% and 33.8%, respectively. Two others that were quite similar of average times work on the week were the participants who worked 20 to 30 hours/week (15.5%) and less than 20 hours/week (12%). Then, during the participants' work in a day, the number of various patients that they treated in a day, the highest percentage of the patients that the participants met was 1 to 5 people (43.7%). It was followed by 6 to 10 people (30.3%). Some participants treated the patients 11 to 15 people (11.3%) and more than 15 people (9.2%). There were the participants not handling the patients, with

a percentage at 5.6%. In detail, the response of the participants who handled the patients showed that the majority of the cases met musculoskeletal or

orthopedic types of cases, with a percentage at 51.4%.

Table 1. Characteristics of Participants

Demographic	Frequency (n)	Percentage (%)
Age (years)		
25-34	77	54.2
35-44	35	24.6
45-55	18	12.7
55-above	12	8.5
Gender		
Male	66	46.5
Female	76	53.5
Education		
Diploma	41	28.9
Bachelor of applied science	21	14.8
Bachelor degree	24	16.9
Physiotherapy profession	14	9.9
Master degree	39	27.5
Doctoral degree	3	2.1
Work Consentration		
Practitioner	108	76.1
Lecturer	10	7.0
Practitioner dan lecturer	24	16.9

Tabel 2. Evidence-Based Practice Profiles of Physiotherapist

No.	Profiles	Frequency (n)	Percentage (%)
Personal Knowledge Improvement			
1	Regularly attend courses or training on physiotherapy		
	Yes	110	77.5
	No	32	22.5
2	A member of a physiotherapy professional organization.		
	Yes	136	95.8
	No	6	4.2
3	Having a specialization in physiotherapy		
	Yes	88	62
	No	54	38
4	If "Yes", the area of specialization		
	Musculoskeletal	37	26.1
	Cardio respiration	3	2.1
	Neurology	8	5.6
	Pediatric	26	18.3
	Geriatric	4	2.8
	Sport	6	4.2
	Ergonomic	2	1.4
	Integument	1	0.7
	MLDV	4	2.8
	No specialization	51	35.9
Experience of Physiotherapy			
5	Working as a physiotherapist (years)		
	2-5 years	31	21.8

	>5 years	25	17.6
	>10 years	32	22.5
	>15 years	21	14.8
	>20 years	33	23.2
6	Hours on average working in a week (hours/week)		
	<20 hours/week	17	12
	20-30 hours/week	22	15.5
	30-40 hours/week	48	33.8
	>40 hours/week	55	38.7
7	Number of patients treated each day (people)		
	1-5 people	62	43.7
	6-10 people	43	30.3
	11-15 people	16	11.3
	>15 people	13	9.2
	Not handle patient	8	5.6
8	The majority of patients or types of cases treated on a daily basis		
	Musculoskeletal/orthopedic	73	51.4
	Cardio respiration	3	2.1
	Neurology	25	17.6
	Pediatric	19	13.4
	Geriatric	9	6.3
	Sport	5	3.5
	Not handle patient	8	5.6
Scientific Evidence-Based			
9	Reading or reviewing research articles/literature related to your clinical practice in a month?		
	<1 article	39	27.5
	2-5 article	79	55.6
	6-10 article	10	7.0
	11-15 article	14	9.9
10	Using literature and research results in the clinical decision-making process		
	Never	5	3.5
	Seldom	27	19.0

Thirdly, in the study, the scientific evidence-based described reading or reviewing the research articles, using literature in clinical decision-making, and learning basics of evidence-based practice when studying at college. In detail, all participants read or reviewed the research articles related to the participants' clinical practice. Most of the participants read 2 to 5 articles a month, with a percentage of 55.6%. Some of the participants read more than six articles a month, following 6 to 10 articles with 10 participants (7%) and 11 to 15 articles with 14 participants (9%). Thirty-nine participants read less than 1 article (27.5%). Further, almost all the participants used literature to consider their clinical decision-making, although there were variations of responses. Twenty-seven participants

(16.9%) always decided by considering research results. The participants who responded often and sometimes using literature and research results in your clinical decision-making process were 40 participants (28.2%) and 46 participants (32.4%). Two other responses showed that the participants seldom or never used literature or research results in their decision, following 27 participants (19%) and 5 participants (3.5%), respectively. Based on the background learning evidence-based practice when the participants studied in the college, the results showed that the majority of participants learned evidence-based practice in total 118 participants with the percentage at 83.1%. However, twenty-four participants with a percentage of 16.9% did not

study the evidence-based practice when they were in college.

DISCUSSION

The current study described the evidence-based practice profiles of Indonesian physiotherapists. The study categorized the profiles into personal knowledge improvement, the experience of physiotherapy, and the use of scientific evidence-based.

Based on the personal knowledge improvement, the results revealed that the majority of the participants attended the courses or training. Physiotherapists in Indonesia need to attend the courses or training which provided professional credit units. Professional credit unit became something that was so sought after the issuance of the Minister of Health Regulation no. 1796 of 2011 concerning Registration of Health Workers. According to the ministerial regulation, competency certificates that have expired can be extended through the participation of health workers in education and/or training activities as well as other scientific activities following their field of duty or profession. Health professionals including physiotherapists must submit at least 25 professional credit units over 5 years. The study from Thomas *et al* (2009) said that 2-hours educational approaches were not significant to improve general clinical practitioners (Bozzolan *et al.*, 2014). They compared this with a control group that received no intervention. The results showed that there were no significant differences between the patients in both groups at follow-up (Overmeer, Boersma, Main, & Linton, 2009).

Besides, joining as a member of a physiotherapy organization became a choice of almost the physiotherapist who participated in the study. Professional communication competencies, collaborative framework, professional attitude can learn in an organization (Hiller, Guillemin, & Delany, 2015). In addition, a physiotherapist can learn to possess skills of empathic understanding of the patient, also how to respect the patient's feelings and sensations in which motivation and emphatic skills can contribute to the professionalism of physiotherapists. (Włoszczak-Szubzda, Jarosz, & Goniewicz, 2013)(Murray *et al.*, 2015). Further emphasis on communication skills was also noted as being key to enhancing EBP competency, particularly about realizing shared decision-making between patients and healthcare practitioners in making evidence-based decisions.

Regarding physiotherapy specialization, the physiotherapist in Indonesia had the area specialization with the majority in the musculoskeletal area. We assume that most of the

physiotherapists had musculoskeletal expertise because there are many cases related to musculoskeletal cases, like injury, osteoarthritis, frozen shoulder, low back pain, and others. However, for other area specialization except musculoskeletal, the number of expertise is not that much because it might be the physiotherapist treating many musculoskeletal cases than others cases, so that is why the differences are enough far. In detail, ensuring appropriate specialization of advanced levels of knowledge and skill is an important aspect of the proposed clinical career structure like in supervising training or teaching. Appropriate recognition of areas of clinical specialty is essential to promote intra- and inter-professional referral, public awareness, and intrinsic reward through professional acknowledgment. Besides, motivations and personal interests are the major factors that drive the physiotherapist to have the expertise (Fabumni, Adebajo & Akinola, 2020). Recommendations by parents, friends, or relatives who were physiotherapists did not play a major role. This is a variant of another finding by Ibikunle *et al.* (Ibikunle, Kalu, & Useh, 2013) that the majority of those having physiotherapy specialization were influenced to do so by physiotherapists.

Regarding the scientific evidence-based to support the clinical decision of the physiotherapist when they treated the patients, the study described that most of the physiotherapists read or reviewed the research articles around 2 to 5 articles each month. It might be that the physiotherapists have a high workload and lack the time to spend a long time reading or reviewing the articles. The other is the study related to the physiotherapy field that much from the international journal and the physiotherapist might be limited to understand the English version articles (Karin, Filip, Jo, & Bert, 2009)(Melman, Elkins, Kamper, & Moseley, 2020). In addition, the barriers are considered as a lack of competence in undertaking literature searches and critical appraisals, negative perceptions about research and the physiotherapists' role in it, and a low self-efficacy to perform EBP activities. Besides, The study from Nair *et al* (2021) reported a lack of research skills and statistical analysis as a barrier (Mohebi, Parham, Sharifirad, & Gharlipour, 2021)(Boström, Sommerfeld, Stenhols, & Kiessling, 2018). This could be attributed to the fact that there is a lack of access or awareness to journal articles among physiotherapists (Yahui & Swaminathan, 2017)(Lai, Teng, & Lee, 2010). The study showed that most physiotherapists learned about evidence-based practice. Although using literature and research results in the clinical decision-making process, physiotherapists' responses showed that between sometimes and often responses are

differences not that much. It might also relate to the type and quality of the available evidence. The dominance of randomized controlled trials (RCTs) in the hierarchy of evidence and noted that RCTs are not able to capture the multifaceted individualistic nature of health (Karin et al., 2009).

The other thing that is important in evidence-based practice is the experience in the physiotherapy field. When clinical research is not available to support our intervention for patients, the experience of the practice can help the physiotherapist make the clinical decision. The physiotherapist experience who participated in the study showed the various years of work, the variation of the average hours of work, and the various numbers of patients treated each day. The experience of observations and the assessment of the patient might influence clinical decision-making. The more experiences that have the physiotherapists, the more mature physiotherapists' clinical reasoning are. The physiotherapists collected current information on the patient by using written and verbal information exchange and used this to generate a picture of the patient. The decisions were influenced by the individual characteristics of the physiotherapist, his/her knowledge, and patient perceptions (Holdar, Wallin, & Heiwe, 2013)(Barradell, Peseta, & Barrie, 2021).

There may be some possible limitations in this study. We collect the data based on the response rates of this online survey. It was might insufficient due to the challenges of survey distribution. Since this study relied on participant self-reported, the study is also prone to recall bias as the participants probably do not remember the activities they did.

CONCLUSION

The physiotherapist's profiles in Indonesia in their evidence-based practice refer to personal knowledge, experiences, and scientific research. Findings from this study suggest that the physiotherapists in Indonesia were active to participate in any kind of personal improvement like attending the courses or training, joining as a member of physiotherapy organization. Most physiotherapists also have specialization areas in the physiotherapy field, especially musculoskeletal physiotherapy. The thing that needs improvement of the physiotherapist is the awareness to consider the scientific research or literature to support their clinical decision-making for patients' care.

RECOMMENDATION

The following are the study's recommendations:

1. The use of EBP in physiotherapy services is critical for improving the quality of health care

for patients by providing the best available services.

2. Physiotherapists in Indonesia should be encouraged to use EBP when making clinical decisions.

ACKNOWLEDGMENT

The authors thank all the participants who were involved in this study. Thank you to UPN Veteran Jakarta for the research grant support. The authors would also like to thank the Indonesian Physiotherapy Association staffs who were willing to help distribute this study questionnaire.

REFERENCE

- Barradell, S., Peseta, T., & Barrie, S. (2021). Students and physiotherapists experience physiotherapy in particular ways: A phenomenologically oriented study. *Physiotherapy Theory and Practice*, *37*(1), 106–114. <https://doi.org/10.1080/09593985.2019.1619211>
- Boström, A. M., Sommerfeld, D. K., Stenholms, A. W., & Kiessling, A. (2018). Capability beliefs on, and use of evidencebased practice among four health professional and student groups in geriatric care: A cross sectional study. *PLoS ONE*, *13*(2), 1–15. <https://doi.org/10.1371/journal.pone.0192017>
- Bozzolan, M., Simoni, G., Balboni, M., Fiorini, F., Bombardi, S., Bertin, N., & Da Roit, M. (2014). Undergraduate physiotherapy students' competencies, attitudes and perceptions after integrated educational pathways in evidence-based practice: A mixed methods study. *Physiotherapy Theory and Practice*, *30*(8), 557–571. <https://doi.org/10.3109/09593985.2014.910285>
- Campos, T. F., Beckenkamp, P. R., & Moseley, A. M. (2013). Usage evaluation of a resource to support evidence-based physiotherapy: The Physiotherapy Evidence Database (PEDro). *Physiotherapy (United Kingdom)*, *99*(3), 252–257. <https://doi.org/10.1016/j.physio.2012.12.001>
- Cimoli, C. (2012). Evidence-Based Practice (EBP) in Rehabilitative Physiotherapy. *Internet Journal of Allied Health Sciences & Practice*, *10*(4), 11p-11p. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2012010789&site=ehost-live>
- Cobo-Sevilla, V., de Oliveira-Ferreira, I., Moposita-Baño, L., Paredes-Sánchez, V., & Ramos-Guevara, J. (2019). Evidence-based

- physiotherapy clinical practice in the public health-care service in Ecuador. *Physiotherapy Research International*, 24(1), 1–7. <https://doi.org/10.1002/pri.1745>
- Fabunmi, A., Adebajo, B., & Akinola, T. (2020). Factors influencing study of physiotherapy and preferred choice of specialisation among final year physiotherapy students in Nigeria. *Journal of Health Sciences and Medicine*, 3(2). <https://doi.org/10.32322/jhsm.632717>
- Hiller, A., Guillemin, M., & Delany, C. (2015). Exploring healthcare communication models in private physiotherapy practice. *Patient Education and Counseling*, 98(10), 1222–1228. <https://doi.org/10.1016/j.pec.2015.07.029>
- Holdar, U., Wallin, L., & Heiwe, S. (2013). Why do we do as we do? Factors influencing clinical reasoning and decision-making among physiotherapists in an acute setting. *Physiotherapy Research International*, 18(4), 220–229. <https://doi.org/10.1002/pri.1551>
- Ibikunle, P. O., Kalu, M. E., & Useh, U. (2013). Professional Motivation and plan amongst Graduating Nigerian Physiotherapy Students. *Journal of Human Ecology*, 44(2), 203–206. <https://doi.org/10.1080/09709274.2013.11906659>
- Iles, R., & Davidson, M. (2008). Physiotherapy diagnosis in clinical practice: a survey of orthopaedic certified specialists in the USA. *Physiotherapy Research International*, 11(2), 93–103. <https://doi.org/10.1002/pri>
- Karin, H., Filip, S., Jo, G., & Bert, A. (2009). Obstacles to the implementation of evidence-based physiotherapy in practice: A focus group-based study in Belgium (Flanders). *Physiotherapy Theory and Practice*, 25(7), 476–488. <https://doi.org/10.3109/09593980802661949>
- Lai, N. M., Teng, C. L., & Lee, M. L. (2010). The place and barriers of evidence based practice: Knowledge and perceptions of medical, nursing and allied health practitioners in Malaysia. *BMC Research Notes*, 3. <https://doi.org/10.1186/1756-0500-3-279>
- Lehane, E., Leahy-Warren, P., O’Riordan, C., Savage, E., Drennan, J., O’Tuathaigh, C., ... Hegarty, J. (2019). Evidence-based practice education for healthcare professions: An expert view. *BMJ Evidence-Based Medicine*, 24(3), 103–108. <https://doi.org/10.1136/bmjebm-2018-111019>
- Melman, A., Elkins, M. R., Kamper, S. J., & Moseley, A. M. (2020). Tackling the language barrier to implementing research into practice: A survey of usage of the Physiotherapy Evidence Database. *Brazilian Journal of Physical Therapy*, 24(6), 524–531. <https://doi.org/10.1016/j.bjpt.2019.10.003>
- Mohebi, S., Parham, M., Sharifirad, G., & Gharlipour, Z. (2021). *Social Support and Self - Care Behavior Study*. (January), 1–6. <https://doi.org/10.4103/jehp.jehp>
- Moseley, A. M., Elkins, M. R., Van der Wees, P. J., & Pinheiro, M. B. (2020). Using research to guide practice: The Physiotherapy Evidence Database (PEDro). *Brazilian Journal of Physical Therapy*, 24(5), 384–391. <https://doi.org/10.1016/j.bjpt.2019.11.002>
- Murray, A., Hall, A. M., Williams, G. C., Mcdonough, S. M., Ntoumanis, N., Taylor, I. M., Lonsdale, C. (2015). Effect of a self-determination theory - Based communication skills training program on physiotherapists’ psychological support for their patients with chronic low back pain: A randomized controlled trial. *Archives of Physical Medicine and Rehabilitation*, 96(5), 809–816. <https://doi.org/10.1016/j.apmr.2014.11.007>
- Nilsagrd, Y., & Lohse, G. (2010). Evidence-based physiotherapy: A survey of knowledge, behaviour, attitudes and prerequisites. *Advances in Physiotherapy*, 12(4), 179–186. <https://doi.org/10.3109/14038196.2010.503812>
- Olsen, N. R., Lygren, H., Espehaug, B., Nortvedt, M. W., Bradley, P., & Bjordal, J. M. (2014). Evidence-based Practice Exposure and Physiotherapy Students’ Behaviour during Clinical Placements: A Survey. *Physiotherapy Research International*, 19(4), 238–247. <https://doi.org/10.1002/pri.1590>
- Overmeer, T., Boersma, K., Main, C. J., & Linton, S. J. (2009). Do physical therapists change their beliefs, attitudes, knowledge, skills and behaviour after a biopsychosocially orientated university course? *Journal of Evaluation in Clinical Practice*, 15(4), 724–732. <https://doi.org/10.1111/j.1365-2753.2008.01089.x>
- Perraton, L., Machotka, Z., Grimmer, K., Gibbs, C., Mahar, C., & Kennedy, K. (2017). Embedding Evidence-based Practice Education into a Post-graduate Physiotherapy Program: Eight Years of pre-Post Course Evaluations. *Physiotherapy Research International*, 22(2). <https://doi.org/10.1002/pri.1659>
- Ramírez-Vélez, R., Bagur-Calafat, M. C., Correa-Bautista, J. E., & Girabent-Farrés, M. (2015). Barriers against incorporating evidence-based practice in physical therapy in Colombia: Current state and factors associated. *BMC Medical Education*, 15(1), 1–11.

-
- <https://doi.org/10.1186/s12909-015-0502-3>
- Scurlock-Evans, L., Upton, P., & Upton, D. (2014). Evidence-Based Practice in physiotherapy: A systematic review of barriers, enablers and interventions. *Physiotherapy (United Kingdom)*, *100*(3), 208–219. <https://doi.org/10.1016/j.physio.2014.03.001>
- Włoszczak-Szubzda, A., Jarosz, M. J., & Goniewicz, M. (2013). Professional communication competences of paramedics - Practical and educational perspectives. *Annals of Agricultural and Environmental Medicine*, *20*(2), 366–372.
- Yahui, H. C., & Swaminathan, N. (2017). Knowledge, attitudes, and barriers towards evidence-based practice among physiotherapists in Malaysia. *Hong Kong Physiotherapy Journal*, *37*, 10–18. <https://doi.org/10.1016/j.hkpj.2016.12.002>
- Yamato, T. P., Arora, M., Stevens, M. L., Elkins, M. R., & Moseley, A. M. (2018). Quality, language, subdiscipline and promotion were associated with article accesses on Physiotherapy Evidence Database (PEDro). *Physiotherapy (United Kingdom)*, *104*(1), 122–128. <https://doi.org/10.1016/j.physio.2017.08.003>