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## Soft Skills for Health Care Staff

### A Scoping Review

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<p><b>ABSTRACT</b></p> <p><u>Introduction:</u> Soft skills such as, interpersonal skills, life skills, people skills, social skills, and emotional intelligence are necessary to live a good life and succeed in one's career. Health care professionals need various soft skills at work every day. Seamless teamwork with interdisciplinary team requires high level of communication, adaptability, and trust between team members. Providing the best care for patients requires ability of listening, empathy, sensitivity, and high level of communication with patients and their families. The purpose of this scoping review is to raise awareness of soft skills among people who are involved in the health care sector. It aims to collect all recent research knowledge about soft skills and their importance for professionals working in wide health care sector. The research questions this review aims to answer are: Why is it essential for the health care system personnel to develop soft skills? Could the soft skills be helpful in health care to eliminate the gap between the hospital staff and the patient? And could the patient get better services and the health care staff get higher job satisfaction in health care through soft skills?</p> <p><u>Methods:</u> This study is a scoping review and it started with determining research question by using PICO. The research consisted of systematic data search concerning importance of soft skills in health care professions. Data search was realized in two parts: first pilot search and then final search. The final search was done in three databases: ProQuest, PubMed and Google Scholar and they were chosen based on results of the pilot search. Search gave 1418 studies, and the search results were then analyzed in three stages, first on title level (n=102), on abstract level (n=30) and on full text level (n=12). One more study was added from references of one full text article resulting 13 studies in total included to this review. These 13 studies were read various times carefully and research questions were responded narratively based on information they provided.</p> <p><u>Conclusions:</u> Findings of this review show that various soft skills are very important for health care workers in their day-to-day activities. Good soft skills can even help to handle stress which is very common symptom in health care working environment. They also have positive effect and impact on other people, like coworkers, patients, and their families. Advanced soft skills of health care personnel increase the quality of care and prevent many mistakes, often caused by problems in communication. They are also tightly connected with the level of satisfaction of patients' service experience. Soft skills have positive impact on people's personal life as well as on professional growth. Because of many advantages soft skills provide, their development is recommendable.</p>	
Keywords	Soft Skills, Healthcare staff

## Contents

1	Introduction	1
2	Theoretical background	3
2.1	Types of soft skills	4
2.2	Which are the most important soft skills for health care staff?	4
2.3	How to develop soft skills and how to strengthen them?	6
3	The Purpose, Aim, and Research Questions	8
4	Research Methodology	9
4.1	Data search and selection	9
5	Results	12
5.1	Need for developing soft skills	12
5.2	Soft skills are helpful in Health Care	13
5.3	Healthcare and Soft skills	14
6	Discussion	16
6.1	Teamwork and communication	16
6.2	Health care professions as service professions	17
6.3	Research process	17
6.4	Considering Ethical Issues	18
6.5	Study Limitations	18
7	Conclusion	20
	References	23

## 1 Introduction

The healthcare industry is one of the world's largest and fastest-growing industries (U.S Bureau of Labor Statistics 2020). Over and above those who provide emergency medical services, the aging baby boomer population, and new medical and insurance reforms have driven a need for a wide range of healthcare specialists. To mention some, The Patient Navigator Training Collaborative (2020) lists doctors, physician assistants, nurses, pharmacists, technologists and technicians, psychiatrists and recovery counselors, emotional, mental, and moral service personnel, managerial and support personnel, medical students, community health professionals, and patient navigators as members of this diverse group of healthcare professionals. According to the U.S Bureau of Labor Statistics (2020), the number of positions for different healthcare occupations around the globe is estimated to grow over 30% between 2019 and 2029, making it one of the industries with the most opportunities. Healthcare squad direct entire facilities, specific departments, or medical practices and are therefore required to possess several skills (Majid, Liming, Tong & Raihana 2012).

There are two types of skills: hard skills and soft skills. Hard skills are technical skills, comprising academic knowledge, expertise, and practical exposure whereas individuals' attitudes, strengths, qualities, and personal actions are referred to as soft skills. Both, hard and soft skills are equally important for people to be successful in labor market. Candidates with good soft skills and with ability to use them to make a difference in the workplace and to add value to their organization are sought after by employers. (Bora 2015.)

Soft skills are in most cases essential in securing employment, living a good social life, and working. Soft skills are connected to a few words with very similar meanings, which are known as interpersonal skills, life skills, people skills, social skills, and emotional intelligence. People who aspire to become complete professionals not only need academic and technical skills, but also soft skills to meet the goals of organizations. Soft skills are valued highly on most sectors around the globe, and they are required in all professions whether it is business, employment, politics, administration, or service. Lack of soft skills can be a serious obstacle for person's career development and desired promotions. A considerable number of people are not reaching their career goals because of not having adequate soft skills. To put it simple, humans need soft skills to live a happy and fulfilling life. (Bora 2015; Çelik et al. 2018.)

This thesis is a scoping review that will reveal how important soft skills are in health care professions and which types of soft skills are required in healthcare services. The aim of this thesis is to compile previous studies' knowledge of soft skills in health and hospital administrators, as well as other people interested in the health care system. The aim is also to answer the research question and to promote awareness of soft skills among people who work in the healthcare industry.

## 2 Theoretical background

What are soft skills, exactly? This fundamental question is difficult to address since what constitutes a soft skill varies depending on the setting. Soft skills work in tandem with hard skills to improve a person's interpersonal relationships, job results, and career opportunities. While the technical skills can get you in the house, it is the interpersonal skills that will open the majority of the doors. There is a wide variety of personal characteristics that are critical soft skills for career success, like job ethics, temperament, leadership skills and emotional intelligence to mention few. (Shestakova 2020.)

Soft skills are intangible human traits that help one to flourish in the workplace and achieve professional success in long-term (Daly 2018). According to Collins English Dictionary (2014, s.v. soft skills), "soft skills" refers to a group of personal characteristics, behaviors, attitudes, and social graces that make you a successful employee and compatible to work with. "Soft skills" are described as *"desirable qualities for certain forms of employment that do not depend on acquired knowledge: they include common sense, the ability to deal with people, and a positive flexible attitude"* (Collins English Dictionary 2014, s.v. soft skills). Soft skills include people skills, social skills, communication skills, personality traits, role qualities, emotional intelligence quotients, and other talents, all of which affect our personality and how we are seen by others (Shestakova 2020). Treating patients as individuals rather than just treating their diseases or syndromes is a good example of soft skills. Part of that is explaining things to patients before doing anything, honoring their desires and views, treating them with dignity, being subjective, and encouraging the patient to get involved with decision-making considering their treatment (Van Staden et al. 2006).

Soft skills are needed for many reasons. They are used for self-awareness which means being mindful of the qualities that determine who you are and who you aspire to be. Soft skills also guide in seeing possibilities and choosing between different ones, becoming mindful of the options available, the constraints they impose, and the incentives and pleasure they provide. Soft skills help us to achieve our aspirations. The potential to make informed decisions and strategies based on self–opportunity balance and sound facts is dependable on soft skills. Soft skills also give capacity to assess outcomes, to prepare, and to act to put decisions and aspirations into motion, especially when things are changing. (Shestakova 2020.)

## 2.1 Types of soft skills

Soft skills can be classified into three categories that are: Personal skills, Social skills, and Methodical skills. Although this kind of categorization has been made, the lists of various soft skills are not fixed as it is hard to conceptualize human characteristics. The skills under different categories also interact with each other. (IONOS 2021.)

1. **Personal Skills:** Personal skills are any abilities that distinguish you as a self-sufficient person, like responsibilities, commitment, motivation, self-discipline, self-reflection, and confidence. A positive and self-aware person can find it easy to inspire others in social situations and this is how personal skills interact with social skills. On the other hand, people who are motivated and dedicated are most likely to learn or develop their methodical skills, so interaction between categories happens there as well. (IONOS 2021).
2. **Social Skills:** Social skills are skills that include social contacts and communication, such as with co-workers, supervisors, clients, and other stakeholders. Some of the social skills are empathy, integrability, communication, receive criticism, and team management. Many managers are interested to find out during job interview whether an employee is a good team player and also pay attention to their way of communication. Of course, professional qualifications count, but in some cases, social skills can make the difference. (IONOS 2021).
3. **Methodical Skills:** Since methodological skills often manifest in functional knowledge, this group is the nearest to hard skills. These skills, on the other hand, are difficult to explain since they are often the first step in learning verifiable hard skills. For example, the soft ability of "presentation skills" is a prerequisite for the hard skill of "PowerPoint" operation, and problem-solving requires both soft and hard skills. Analytic skills, presentation skills, problem-solving skills, and stress resistance are considered methodical skills (IONOS 2021).

## 2.2 Which are the most important soft skills for health care staff?

**Communication Skills:** Communication is critical in many workplaces, but it is much more so for health care workers. In addition to regularly speaking with coworkers,

health care professionals must speak with patients and their relatives. According to the Institute for Healthcare Communication, a patient's willingness to seek clinical recommendations, self-manage a persistent medical condition, and cultivate preventive lifestyle patterns is closely related to a health care team member's communication skill (Gibert, Tozer & Westoby 2017).

**Teamwork:** A team player personality is an important characteristic in health care staff. Some areas of health care could be compared with professional sports, with many people coming together to provide care for patients. With the best interests of the patient, everyone must understand how to deal with all other team members. Higher team functioning is related to better patient outcomes, according to a study published in the *Journal of the American College of Surgeons* (Gibert, Tozer & Westoby 2017).

**Empathy:** It is important in health care to be able to empathize with patients and consider their challenging conditions. Empathy is often quoted as a central feature of successful, clinical consultations, even though there is no study into its consequences. (Ratka, John & College 2018.)

**Adaptability:** The word adapt derives from the Latin word *adaptus*, which means to confirm or enter. Adaptability refers to an individual's ability to blend within an established set of methodologies and work culture when working under the limits of limited resources and meeting needs. Adaptability is often known as the ability to discriminate between what happens objectively and subjectively, to effectively adapt one's feelings, emotions, and actions to the situation, and to consider, describe, and provide viable alternatives. (Sirotiak & Sharma 2019.)

**Confidence:** The willingness of an employee to take feedback, work under pressure, and even make critical decisions are influenced by their sense of trust. Patients must have faith in their doctor's or nurse's abilities to handle them. Getting the courage to make quick and knowledgeable decisions, whether at the bedside or in the operating room (OR), is critical to a patient's survival and rehabilitation. (Carrington College Blog 2019.)

**Time Management:** When engaging with patients and their team, healthcare practitioners must show the ability to effectively handle their job duties as well as maintain a relaxed and respectful attitude. This requires ability to prioritize everyday workload and



efficiently perform several tasks at the same time. In the medical profession, lives depend on timelines. (Carrington College Blog 2019.)

### 2.3 How to develop soft skills and how to strengthen them?

Personal development is described as the acquisition of life skills, or the abilities needed to live a good life. In addition to one's career area, a comprehensive curriculum necessitates the learning of "soft skills" such as integrity, emotional intelligence, vocabulary, and conversation, as well as legal and management dimensions. As a result, in this era of globalization, where skilled healthcare personnel are in short supply, and doctors may be called upon to share their ideas and expertise across cultures and continents. This can only work if they can communicate effectively. Personal development has become a value-add for health care professionals, among others. (Nitonde, Rohidas & Vijaya 2004.)

Being receptive to feedback from clinicians, coworkers, and patients is an important aspect of developing soft skills. When people are open to receiving input, they are more able to accept positive advice and use it to enhance their job performance, including soft skills. Feedback on communication skills, group work capacity, time management, and leadership potential should be valued and used for one's own advantage. (Indeed 2021.)

Collaboration with others is the foundation of teamwork. Teamwork may be done in a group setting, or independently with another coworker to accomplish a joint task. Allowing every team member to contribute their fair share during a team project or day-to-day responsibilities and acknowledging and celebrating the group's diverse skills and personalities is a key to successful teamwork. Working in a well-functioning team provides great learning opportunities to all team members. (Indeed 2021.)

Building positive relationships with coworkers is important, and this can be achieved by having open and frank conversations about leisure time plans and activities, families, and interests. Finding similarities in one's life and history with their coworkers build good relationship, which then again affects to working atmosphere, trust, and fluency of work. (Indeed 2021.)

Experimenting with new things and moving out of your comfort zone is important for new roles, new settings, or new leadership. In the workplace, putting oneself in unfamiliar territory will demonstrate to colleagues how seriously you take your job and how eager you are to learn something new. This kind of courage also exposes you to learning new things and to developing. (Indeed 2021.)

### 3 The Purpose, Aim, and Research Questions

The purpose of this study is to raise awareness of soft skills among people who are involved in the health care sector.

The aim of this thesis is to collect information about soft skills and their importance in health care sector. The aim is also to compile knowledge of soft skills in health and hospital administrators, as well as other personnel interested in the health care sector from previous studies.

The PICO model was used to formulate the research questions for this initiative (Table 1). This creates a clear context for generating research questions. PICO employs the presence of four elements: The letters P stand for Problem/Population, I for Intervention, Co for Context, and O for Outcome (Huang, Lin & Demner-Fushman 2006).

The research questions for this scoping review are:

1. Why is it essential for the health care (Co) system personnel (P) to develop (O) soft skills (I)?
2. Could the soft skills (I) be helpful in health care (Co) to eliminate the gap (O) between the hospital staff and the patient (P)?
3. Could the patient (P) get better services (O) and the health care staff (P) get higher job satisfaction (O) in health care (Co) through soft skills (I)?

Table 1. To convert these questions to an answerable, use the PICO method as follows.

PICO	Question 1	Question 2	Question 3
P: Problem/Population	personnel	hospital staff, patient	Healthcare staff, patient
I: Intervention	soft skills	soft skills	soft skills
C: Context	health care	health care	health care
O: Outcome	development	eliminating the gap	getting better services and getting higher job satisfaction

## 4 Research Methodology

A literature review is a research study that aims to comprehend and analyze literature on a particular subject. Finding, filtering, and categorizing research papers is a methodical and systematic procedure. (Bergh et al. 2014: 5; Cimatti 2016: 97.) It expands on the theoretical interpretation of literature and assesses the current hypothesis. It also allows understanding and perception of the situation in a big picture (Heckman & Kautz 2012: 453.) This thesis is a scoping review, and it carefully and thoroughly searches and compiles the recent research that has been carried out on the concerned topic, soft skills in health care sector. According to Pham et al. (2014) scoping reviews aim to recognize and gather all relevant studies published of certain topic and map the core of it.

### 4.1 Data search and selection

The process of doing a literature review is divided into many stages. Following the formulation of the research questions, a comprehensive data search is conducted. The aim is to collect all relevant scholarly papers to discuss the subject. In system data queries, all search results must be examined and this process must be documented in detail. (Cimatti 2016: 97; Jain & Anjuman 2013: 33; Osman et al. 2012: 51; Prodanovic 2014: 8.)

When doing a scoping review, the final papers selected to the review are chosen by comparing them to inclusion and exclusion criteria shown (Table 2). The papers are validated at the title -, abstract -, and full-text levels. (Lee Keng Ng 2020.) Criteria for inclusion and exclusion is very important as it gives the reader a clear idea on which basis the studies were decided to include in the review. It also works as clear guideline when analyzing the search results and determines whether to include or exclude a study from a review. (Peters et al 2020.) The requirements for inclusion and exclusion must be explained clearly and thoroughly. Criteria should therefore be realistic and relevant to the study questions or subject at hand. Systematic mistakes are avoided by using comprehensive inclusion criteria. (Lee Keng Ng 2020.) The inclusion and exclusion criteria shown in Table 2 was created before doing the data search.

Table 2. Inclusion and exclusion criteria

Criteria for inclusion	Criteria for exclusion
Articles released between 2017-2021	Articles published before 2017
Publications in English	Other languages than English
Peer-reviewed articles	Not peer-reviewed
Academic journals, qualitative reviews, nonstandard source of information	Dissertations
Free access articles addressing research questions	Articles not addressing research questions

To begin the data search process a pilot search was conducted. This was designed to get a deeper understanding of the available information on the final project topic and to make the final data search more effective. A pilot search was conducted before the final data search using a mixture of search terms: *soft skills* and *healthcare*. The databases used for pilot search were ProQuest, Elsevier, ScienceDirect, PubMed, Cinahl, and Google Scholar. The search results were limited to studies published earliest in 2017. This was done to see whether there is enough data available in recent studies, or if the timeline must be expanded for the final data search. On a basis of the pilot search, ProQuest, PubMed, and Google Scholar were selected as databases to be used in the final data search. Also, it was decided to limit the search to studies published on 2017 and after.

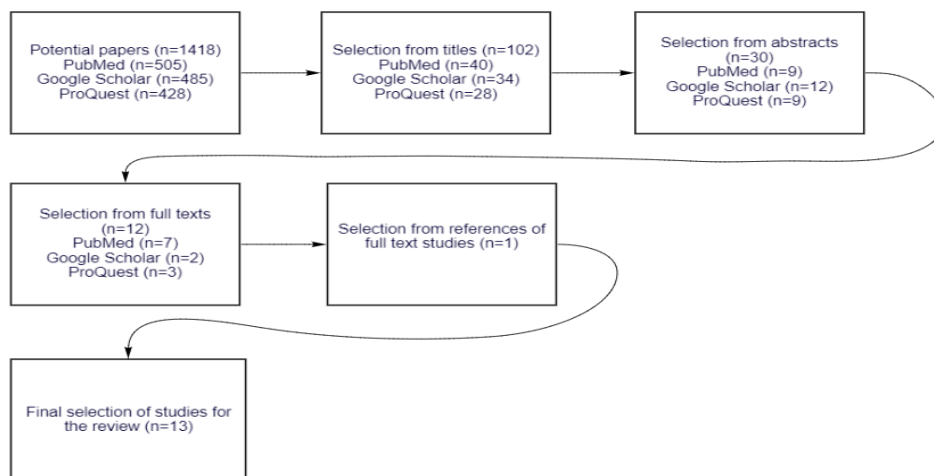


Figure 1. Process of selecting articles.

The final search was done during February 2021. The following keyword combinations were used in the final search: *soft skills*, *health care*, and *soft skills for health care*. PubMed gave 505 hits, Google Scholar 485 hits, and ProQuest gave 428 hits with search terms health care and soft skills, and their combinations. Detailed description of the searches is shown in Appendix 1. Data search. A total of 1418 articles about the topic were found with the keywords used. The analysis of the studies was based on the inclusion and exclusion criteria that is shown in Table 2. Process of selecting articles for the review is shown in Figure 1. First, the papers were analyzed further at the title level and relevant studies were selected to be analyzed on abstract level (n=102). From analysis of abstracts (n=30) studies were included to be read on full-text level. After reading all 30 papers carefully, a final decision was made based on inclusion and exclusion criteria. 12 papers were selected from full-text analysis and one study that was found in references of full-text articles. As a result, 13 papers were selected to be included in the review.

The quality of the studies was evaluated with different tools for different study design. Selected studies included seven qualitative studies and to assess their quality JBI Critical Appraisal Checklist for Qualitative Research was used. All studies showed good quality from 70% to 100% and were accepted to include in this thesis (Appendix 4). Selected studies also included four quantitative studies and EPHPP Quality Assessment tool for Quantitative studies was used to evaluate them (National Collaboration Centre for Methods and Tools). This evaluation proved all four studies strong quality and based on this they could be included to this study (Appendix 5). Reviews were assessed with JBI Critical Appraisal Checklist for Text and Opinion (JBI) and evaluation proved all 3 studies good quality (Appendix 6). So, in the end all 13 articles were included to the study.

## 5 Results

Papers included to this review are from between the years 2017 to 2021. Many of the excluded articles had shortcomings in terms of grammar, text availability, and study queries. Also, many studies were left out because of limited access full text articles. Mostly the reason for exclusion was that the content of article did not provide answer to set research questions. The soft skills for health care practitioners were well outlined in the selected papers. The studies were conducted in 9 different countries across the globe as Figure 2 presents. The studies mainly consisted of analyses, experimental case studies, and key soft skills issues for the healthcare staff. The full description of selected studies can be seen is Appendix 3.

The selected studies were carefully read repeatedly and concentrating on finding information that answers the research questions. The findings were then summarized in narrative way to answer research questions.



Figure 2. Overview of the selected studies.

### 5.1 Need for developing soft skills

The first research question was: Why is it essential for the health care system personnel to develop soft skills? The reviewed studies highlighted many reasons to support this.

Since soft skills include a wide range of personal abilities, such as analytical thinking, social aptitude, organizational skills, leadership abilities, and ethical attitudes, healthcare workers must improve them as these skills are essential in their everyday work (Bergh et al. 2014; Cimatti 2016; Heckman & Kautz 2012; Tulgan 2015). soft skills

are required for personal, professional, and organizational success (Cimatti 2016; Jain & Anjuman 2013; Osman et al. 2012; Platt 2008 & Prodanovic 2014). According to Wats and Wats (2009), hard skills account for just 15% of a person's accomplishment, while soft skills account for the remaining 85%. Soft skills are critical for productivity and manpower quality as well as customer experience at the organizational level (Tulgan 2015).

The four most important categories of skills needed for healthcare leadership are communication, problem-solving, organization, and self-evaluation, according to Taylor et al. (2002). IOM (Institute of Medicine) (2011) supports this perspective by arguing that seasoned healthcare professionals who cultivate high levels of leadership skills are best able to highlight patient needs, contribute to lower mortality rates, and effectively empower and guide healthcare personnel.

## 5.2 Soft skills are helpful in Health Care

When referring to the second research question Could soft skills be helpful in health care to eliminate the gap between the hospital staff and the patient? As soft (service) skills become more important, there is growing fear that healthcare workers are struggling to offer compassionate care (Dyson 2018; Pearson & McLafferty 2011). After 100 unannounced hospital checks in 2011, one of the most often reported issues, according to the Care Quality Commission in the United Kingdom, is workers referring to patients dismissively or disrespectfully (Dean 2012). Although expertise and experience are essential, according to Giordano (1993), what surgical patients needed was facts and proof that healthcare workers cared. According to survey of 139,830 surgical patients, the following qualities of health workers are significant to them:

- There was a lot of friendliness and promises.
- Patients' personal and unique interests are taken into consideration.
- Concern for the privacy of patients, as well as attention to hospitalization, is inconvenient.
- Informing the whole family of the patient's diagnosis or treatment.



- Tests and therapies are discussed.

Weigand (2013) affirmed that the philosophy of health care packages (practices to attain health outcomes) has evolved from patient treatment to client loyalty, which included empathy and consideration for patients, twenty years after Giordano's (1993) research. Even in the emergency room, the initial greeting and nature of the healthcare workers-patient relationship will set the tone for the rest of the stay.

The concentration on soft skills has continued unabated over the decades. Beyond technological advances, the emphasis of healthcare services shifted to improving service efficiency. (Weng et al. 2016.) There were requests to enhance patients' and family members' interactions by improving everyday contact, responding quickly to call bells, and immediately responding to pain relief (Drumm 2006). Even those who have never received long-term health care, either as patients or as family members of inpatients, consider the importance of soft skills. So, in this context soft skills are very important for establishing good relationship between the patients and health care staff.

### 5.3 Healthcare and Soft skills

Third research question was: Could soft skills help patients get quality treatment and health care workers experience greater job satisfaction? Professional skills are considered the most important aspect of health care for health care staff. In particular, health care facilities put a strong focus on the growth of these abilities, although comprehensive training in successful teamwork and communication is often overlooked (Leonard 2004). Communication, teamwork, and delegation are sometimes dismissed as "soft skills," ignoring the fact that the majority of unintended medical mistakes are caused by a breakdown in caregiver communication. Interdisciplinary collaborations are increasingly being used to provide health care, and responsibilities must be delegated according to human expertise and area of experience. Healthcare staff must be able to collaborate and communicate with all members of the medical staff, and they are increasingly required to be adept at delegating to support staff, whose jobs they are primarily responsible for. The creation of an atmosphere that facilitates patient practice could have been supported by the innovations unit's group norms, which include direct collaboration, appreciative vocabulary, approachability, cooperation, transparency, and loyalty, so undoubtedly soft skills are helpful in terms of the patients' service. (Ray & Overman 2014.)

Job satisfaction is defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke EA 1976). Health care professionals’ job satisfaction has been attributed to structural and relational empowerment (Larabee et al. 2003; Laschinger, Finegan, Shamian & Wilk 2001). Employee experiences of empowering circumstances in the workplace, such as access to knowledge, getting help, having the skills needed to do the job, and having the ability to learn and improve, are all linked to structural empowerment (Kanter 1993). Psychological empowerment, on the other hand, is a multifaceted framework comprised of four cognitions that define a person’s attitude toward his or her work. To put it another way, the importance of a work goal, integrity (an individual’s belief in their ability to complete job requirements), self-determination (autonomy or authority over work behavior/processes), and effect (the degree to which an individual can affect work outcomes) are the four cognitions. (Spreitzer 1995.)

Employees who are psychologically empowered and happy with their jobs are more likely to feel dedicated to their jobs, which leads to higher levels of success, according to studies (Leggat, Bartram, Casimir & Stanton 2010). So, directly and indirectly soft skills affect the job satisfaction of the healthcare staff.

## 6 Discussion

The importance of soft skills in general in health care professions is undoubtedly very important, could be even said that it is critical. A health care professional cannot simply perform well as a whole if they do not have soft skills. It is possible of course to perform treatment procedures and care tasks technically right but if the human touch is missing, the experience the patient receives is not whole and satisfying. According to Taylor et al. (2002) the four most important categories of skills needed for healthcare leadership are communication, problem-solving, organization, and self-evaluation and IOM (Institute of Medicine) (2011) supports this perspective by arguing that those health care managers with great soft skills are best able to highlight patient needs, contribute to lower mortality rates, and effectively empower and guide healthcare personnel. Also, Ray and Overman (2014) state that most of the mistakes in health care operations happen because of misunderstandings and unclear communication. So, the importance of soft skills does not only show on mental level, but also in physical quality and results of care.

### 6.1 Teamwork and communication

Teamwork skills were highlighted throughout the study. Review studies supported what was already said in theory part that teamwork skills are essential for interdisciplinary team to perform well, for example in an operation. Good teamwork skills also enhance the general atmosphere at workplace and builds trust, and that is why training for those skills should be provided for health care professionals, especially to the ones that work in health business management (Abraham, Stewart, & Solimeo 2021; Al-Araidah et al. 2016).

Teamwork is tightly connected to communication skills because team cannot function without proper communication. Communication issues come many times with many problematic causes. Unclear communication between health care staff when changing shifts can have serious consequences if person who is starting their shift has missed important information on some patient's care and status. People should also put effort on face-to-face communication and not just leave it to computers (Abraham, Stewart, & Solimeo 2021), because patient's status might have those important small details and elements, that patient records might not include. Lack of communication causes uncertainty and mistakes among staff and feeling of mistreatment on part of patients and

their families (Al-Araidah et al. 2016). In health care professions it is very important to communicate clearly all the time with patient and their families so that they know what is going on and they can participate and have opinion on their care and treatment. For health care students as well as for any health professional good teamwork and communication inside the team provides safe work environment and great learning opportunities (Bergh et al. 2006).

## 6.2 Health care professions as service professions

In history people went to hospitals to get treated and doctors ordered what they thought was the best. The role of a doctor and also other health care professionals has dramatically changed in last decades. Now people working in health care professions are in service professions. Patients are and should be seen and treated as customers, who have their own will and opinion of their health. This has probably somehow made the role of health care professionals more complicated, as they now have to discuss with patient and many times with their family about treatments, care, operations and medications. Everyone has internet on their phone and tablets and have easy access to all kind of information. This easily makes patients feel like professionals of their own health, which might be often frustrating for real health care professionals.

This situation requires advanced level of soft skills from nurses, doctors, and other professionals. They need to be able to adapt to this changing world and work environment. But this is not only negative issue. It is highly important that health care professionals take time to listen the patient carefully, not just superficially. This is many times challenging in busy schedules of hospitals and care centers. But it makes a big difference on the level of quality of the care the patient experiences.

## 6.3 Research process

The process of doing this review was challenging as it was the first time, I conducted any kind of literature review. After getting a hold on the process and after the pilot search, choosing the databases and doing the final search went well. As a method scoping review was good, because it does not have so many limitations on behalf of type of studies that can be included to the review. Somehow it was still confusing because Metropolia university of Applied Sciences had some other requirements for the thesis that were not included in requirements of scoping review. These were quality evalu-

ation and systematic content analysis, that is missing from this study and instead the results are presented in narrative way.

The topic itself was inspiring and it was not too difficult to find enough suited studies to include in the review. Although, soft skills might be many times considered obvious, lack of them or issues with them still often are highlighted in the research of patient's and health care staff's opinion and experience.

#### 6.4 Considering Ethical Issues

This study is a scoping literature review and so the research doesn't include handling sensitive information that would need ethical consideration. The studies that were selected to this thesis went through quality assessment that included assessment of ethics in a little bit different way for different study designs.

Although the quality assessment included parts that evaluate possible bias, all selected studies did not include clear description of them. This might cause bias to this review as well. Also, the fact that studies in English language were the only ones excepted to this review, might cause bias.

The research was conducted in transparent way and all steps of data search were documented in detail. This makes it possible for anyone to repeat and review the results of the data search and through data the results of this thesis.

The author has no conflict of interest in this study and there was no funding for this study.

#### 6.5 Study Limitations

Limitations are events or circumstances that occur in a sample that are beyond the researcher's influence. Furthermore, they narrow the scope of an analysis which may often affect the outcome and conclusions that can be made. Any analysis has limits, regardless of how well it is performed and constructed. Furthermore, this is one of the reasons we avoid using the words "prove" and "disprove" when discussing research results. It's still likely that further testing will call into question the relevance of some theory or study inference (Wiersma 2000: 212).

For this study data collection was used on the basis of general healthcare workers or patients for selected area or for selected institutions in previous study. But after analyzing the data, which was collected, it showed that in every situation different soft skills are used to be applied and most common skills are also required to handle the uncertain load.

Validity is considered in the limitations of qualitative research. "Because qualitative research takes place in a natural environment, replication is exceedingly difficult to replicate studies" (Wiersma 2000: 211). To identify the validity basic soft skills like communication, team work, empathy and many more are consider for identify the qualitative research.

## 7 Conclusion

The results of this thesis show that healthcare workers grasped the general idea of soft skills but lacked a systematic understanding of what it means. The study's findings also show that healthcare workers need to be trained in social skills, as this would increase their job success in the clinical setting and the way they interact with patients. Soft (service) skills are important for the effectiveness of health care organizations and practitioners, in addition to the treatment recipients, who are patients and their families.

### List of studies included to this scoping review

1. Abraham, T., Stewart, G., and Solimeo, S. (2021) The importance of soft skills development in a hard data world: learning from interviews with healthcare leaders. *BMC Medical Education*, 21(1), 1–7.
2. AbuJbara, N., and Worley, J. (2018) Leading toward new horizons with soft skills. *On the Horizon*, 26(3), 247–259.
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4. Bergh, A., Van Staden, C., Joubert, Krüger, C., Pickworth, G, Roos, J., ... Lindeque, B. (2006) Medical students' perceptions of their development of 'soft skills' part II: The development of 'soft skills' through 'guiding and growing.' *South African Family Practice*, 48(6), 15-15d.
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12. Sisodia, S., and Agarwal, N. (2017) Employability Skills Essential for Healthcare Industry. *Procedia Computer Science*, 122, 431–438.
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### Appendix 1. Data search

Database	Search terms	Timeline	Hits
Google Scholar	Soft skills, health care, soft skills for health care	2017-2021	485
PubMed	Soft skills, health care, soft skills for health care	2017-2021	505
ProQuest	Soft skills, health care, soft skills for health care	2017-2021	428

**Appendix 2: Description of search process**

<u>Database</u>	<u>Keywords and their combinations</u>	<u>Search result</u>	<u>Selection from titles</u>	<u>Selection from abstracts</u>	<u>Final selection from full texts</u>
Google Scholar	Softskills, Healthcare, Softskills for Healthcare	485	34	4	2
PubMed	Softskills, Healthcare, Softskills for Healthcare	428	40	10	7
ProQuest	Softskills, Healthcare, Softskills for Healthcare	505	28	5	3
Total		1418	102	19	12
Added studies from selected full text articles' references					1
Total					13

## Appendix 3: Description of studies

1	Reference	Country	Aim and purpose	Design	Data and methods	Main results
1	Laar, L., Dube, B. M., (2017). Nursing students' perceptions of soft skills training in Ghana	Ghana	The quality of nursing care rendered today is markedly reducing and the amount of time spent with patients listening to and explaining issues concerning their conditions is gradually diminishing. The therapeutic touch and the listening ear of the nurse are no longer accessible to the patient. Understanding what non-technical skills are and their relevance for healthcare practitioners has become a new area of consideration. Although recent literature has highlighted the necessity of introducing soft skills training and assessment within medical education, nursing education is yet to fully embrace this skills training.	The study was conducted in one of the five nursing training colleges in the Upper East Region of Ghana. The population comprised the second- and third-year students of the registered general nursing (diploma) programme in the selected Nurses Training College, Bawku. The researcher selected this institution because it had students from all regions of Ghana.	A quantitative research design with descriptive and explorative strategies was used. One hundred and ten nursing students were sampled after permission to conduct the study was requested and obtained from the University of KwaZulu-Natal Ethics Committee.	The results indicated that a majority (88.8%) of respondents understood the concept of soft skills and agreed with the definition of 'soft skills'. They furthermore agreed that soft skills should be part of the training that student nurses receive during their professional training.
2	Schurink, W. J., Kriger, C., Bergh, A. M., Van Staden, C. W., Roos, J. L., Pickett, G. E., ... Lindeque, B. G. (2006). Medical students' perceptions of their development of 'soft skills' part I: A qualitative research methodology.	Pretoria	Following the introduction of a new, integrated, problem-oriented undergraduate medical curriculum at the University of Pretoria (UP) in 1997, a research project was undertaken to study interpersonal skills, professional attitudes, teamwork, ethics and related topics – which have come to be known collectively as 'soft skills'. This contribution is the first of two articles on the professional socialization of medical students and their development of 'soft skills'. It describes the particular qualitative methodology developed for, and applied to, the study of soft skills among medical students at UP.	The aim of the study was to explore the subjective meanings that students attributed to soft skills, as they understood them. These subjective meanings involve the way students interact meaningfully with fellow students, lecturers and other individuals participating in the medical and clinical education programme, and the way they construct shared conceptualizations of soft skills and medical education in their lives and social world. A qualitative approach was considered most appropriate, as this study set out to uncover subjective and diverse meanings that do not necessarily amount to generalisable truths. The particular qualitative strategy or design used was that of an extended case study, or 'casing', within the modernist theoretical orientation of symbolic interactionism. Elements of process evaluation were incorporated into the design to account for the process of curriculum reform within which this study was embedded.	This paper describes the aim of the study, reasons for adopting a qualitative research approach to achieve this aim, the theoretical orientation underpinning the qualitative approach that we considered most suitable, the design, the sampling, the data management and analysis, and the methods that we deployed to ensure the credibility of the findings.	The modernist qualitative research approach enabled us to uncover, describe and illuminate the subjective points of view of soft skills as expressed by final-year medical students before and after curriculum reform. More specifically, by carrying out an extended case study we were able to perform a process evaluation of the curriculum reform in terms of soft skills and the professional socialization of the students. This paper outlines how qualitative research methods enabled us to capture and explore aspects of the inner life (social worlds) of these students. Whether they would be the same, similar or different in another setting are questions for further exploration or research – questions prompted by our study in a manner that illuminates the qualities that may be inherent in these subjective meanings.
3						
1	Reference	Country	Aim and purpose	Design	Data and methods	Main results
1	Bergh, A. M., Van Staden, C. W., Kriger, C., Pickett, G. E., Roos, J. L., ... Lindeque, B. G. (2006). Medical students' perceptions of their development of 'soft skills' through 'guiding and growing'.	Pretoria	This paper reports on medical students' views on the ways in which their 'soft skills' were developed. It is the result of a study on soft skills among two groups of students before and after curriculum reform at the School of Medicine of the University of Pretoria. One of the aims of the reform was to provide more teaching and learning opportunities for the development of soft skills. Soft skills include professional interpersonal and social skills, communication skills, and professional and ethical attitudes.	Symbolic interactionism was chosen as the theoretical framework to guide the research design. This allowed for the exploration of how medical students saw and defined their situation and how they constructed shared conceptualizations of their development of soft skills.	As symbolic interactionism was used as the theoretical framework to guide the research, qualitative methods were used to collect the data. A purposive-theoretical sample of 42 final-year medical students from the traditional curriculum and 49 from the reformed curriculum was recruited. Data were collected by means of focus groups, individual in-depth interviews and autobiographical sketches.	The views on the development of soft skills differed very little between the traditional and reformed curriculum groups, except that students who had followed the reformed curriculum felt more prepared through the increased teaching and training efforts. Further consideration needs to be given to the intention of the 'changed curriculum compared to the old'. The ways in which the participants in the study described their development of soft skills could be categorised as a complex interplay between 'being' and 'becoming'. Instead of using the word 'acquisition' of soft skills, 'development' seemed to be more appropriate. The metaphor of 'guiding' and 'growing' also captures the development of these skills better than the terms 'teaching' and 'learning'.
4	Saylor, J., Hertenberg, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamano, C. J. (2018). Effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students.	USA	The purpose of this study is to describe the nursing students' experience and perceived confidence after completing a service learning nursing course.	This is a descriptive, qualitative research study that used reflection and a perceived confidence questionnaire.	As part of the course requirements, students completed an eight-item question confidence survey before and after the diabetes camp related to diabetes and camp management, and interpersonal abilities with patients, families, and healthcare professionals. Within 48–72 h after diabetes camp, the students completed the reflection paper. The pre and post Confidence Surveys were analysed using a t-test and thematic analysis was used to analyze the reflection paper.	Overall, perceived confidence levels increased after completing the service learning course (t = -9.21, p < 0.001). Four themes emerged from the qualitative analysis: pre-camp assumptions and fears, growth in confidence, understanding diabetes management in the community, and appreciation for learning beyond the classroom and hospital setting. Conclusions: This service learning course provided nursing students the ability to not only develop diabetes clinical skills and perceived confidence, but also life skills including teamwork, leadership, and conflict resolution.
5	Ng, L. K. (2020). The perceived importance of soft (service) skills in nursing care: A research study.	Singapore	Nursing education has transformed over time. While this is particularly evident in the integration of technology in pedagogy, it is not evident whether the training of soft (service) skills has also evolved effectively. Though soft (service) skills are much less tangible than technology, they are perennially relevant and important for nursing care which is essentially people-oriented.	The current lack of focus on soft skills, and the time lapse since Lim and Tang's study in 2000, made this particular research project warranted and timely in Singapore. The main objective was to determine how soft (service) skills were being perceived by patients and their family members.	This exploratory research made use of non-probability sampling technique. A total of 35 potential participants (researcher's personal contacts) were invited via email to participate in the online survey, on a voluntary basis in February 2020. The personal contacts comprised the researcher's friends and acquaintances who have the English language proficiency to participate in the survey.	Based on quantitative data, patients and family members rated the soft (service) skills of reliability and responsiveness to be highly important for nursing care. Additionally, the participants' qualitative comments pointed toward the importance of empathy, assurance and responsiveness. The conclusion was that besides knowledge acquisition and technical competence, nursing curriculum could explicitly incorporate more soft (service) skills to enhance the care standard.
1	Reference	Country	Aim and purpose	Design	Data and methods	Main results
1	Stoodia, S., & Agarwal, N. (2017). Employability skills essential for Healthcare industry.	India	Employability skills are identified as one of the valuable policy tools to upgrade mobility and earnings. Organization's employees are required to enhance the knowledge and skills for performance and competitiveness. This research paper is an attempt to find the major employability skills needed in medical service vertical of the Healthcare industry.	It is the systematic and methodical process of searching, filtering, and classifying research papers.	They used to find the paper based on title, abstract and based on content. Afterward justify the identify final 25 paper which are correlate with the employability skills	They represent the nine skills viz. Communication skills, ICT skills, Work Psychology skills, Teamwork skills, Interpersonal skills, Critical Thinking and Problem Solving skills, Self-management skills, Planning and organizing skills and Conceptual and Analytical skills were identified, which are the backbone of any successful organization.
7	Omair Al-Aradah, Nader Al Theeb, Marwan Baab, Nabeel Mandilawi, (2016). A Study of Deficiencies in Teamwork Skills among Jordanian Caregivers.	Jordan	The paper presents a study of deficiencies in teamwork skills at Jordanian hospitals as seen by team members. The study aims to identify training needs to improve teamwork-related soft skills of caregivers to enhance staff satisfaction and improve quality of care. Moreover, the article provides a methodology to identify the training needs in any healthcare workplace by repeating the same questionnaire.	A self-administered questionnaire was designed to study deficiencies in teamwork and team leadership at Jordanian hospitals as seen by team members. Surveyed care providers included physicians, nursing and anaesthetologists operating in emergency departments, surgical operating rooms and intensive care units in various hospitals.	With a response rate of 78.8%, statistical analysis of collected data of opposing staff members revealed low levels of satisfaction (40.7 – 48% opposing), lack of awareness on the impact of teamwork on quality of care (15.4 – 22.1% opposing), low levels of involvement of top management (27.1 – 37.3% opposing), lack of training (52.5 – 69.8% opposing), lack of leadership skills (29.8 – 60% opposing), lack of communication (22.3 – 40.1% opposing), lack of employee involvement (37.6 – 50.8% opposing) and lack of collaboration among team members (28.6 – 50% opposing). Among the many, results illustrate the need for improving leadership skills of team leaders, improving communication and involving team members in decision making.	Several studies investigated relationships between teamwork skills and quality of care in many countries. To authors' knowledge, no local study investigated the deficiencies of teamwork skills among Jordanian caregivers and its impact on quality of care. The study provides the ground for management at Jordanian hospitals and to healthcare academic departments to tailor training courses to improve teamwork skills of caregivers. Data of this study are collected from the society who is working in the field of healthcare. As the results of this produced from a real data, it is expected that applying the recommendations will impact the society positively by enhancing the patients' satisfaction.
8	Weggebaan-Jansen, A. M., & Van Wijngaarden, J. (2018). Transferring skills in quality collaborative focused on improving patient logistics.	Netherlands	A quality improvement collaborative, often used by the Institute for Healthcare Improvement, is used to educate healthcare professionals and improve healthcare at the same time. However, no prior research has been done on the knowledge and skills healthcare professionals need to achieve improvements or the extent to which quality improvement collaboratives help enhance both knowledge and skills.	Our research focused on quality improvement collaboratives aiming to improve patient logistics and tried to identify which knowledge and skills are required and to what extent these were enhanced during the QIC.	We defined skills important for logistic improvements in a three-phase Delphi study. Based on the Delphi results we made a questionnaire. We surveyed participants in a national quality improvement collaborative to assess the skills rated as 1) important, 2) available and 3) improved during the collaborative. At two sense-making meetings, experts reflected on our findings and hypothesized on how to improve (logistic) collaboratives.	The Delphi study found 18 skills relevant for reducing patient access time and 21 for reducing throughput time. All skills received from the Delphi study were scored as 'important' in the survey. Teams especially lacked soft skills connected to project and change management. Analytical skills increased the most, while more reflexive skills needed for the primary goal of the collaborative (reduce access and throughput times) increased modestly. At two sense-making meetings, attendees suggested four improvements for a quality improvement collaborative: 1) shift the focus to project-change management skills; 2) focus more on knowledge transfer to colleagues; 3) teach participants to adapt the taught principles to their own situations; and 4) foster intra-project reflective learning to translate gained insights to other projects (inter-project learning).
1	Reference	Country	Aim and purpose	Design	Data and methods	Main results
1	Owaga, C. O., & Talbert-Slagle, K. (2019). Training the next generation of Africa's doctors: Why medical schools should embrace the team-based learning pedagogy.	Uganda	As far back as 1995, the Cape Town Declaration on training Africa's future doctor recognized the need for medical schools to adopt active-learning strategies in order to nurture holistic development of the doctor. However, medical education in Africa remains largely stuck with traditional pedagogies that emphasize the 'hard skills' such as knowledge and clinical acumen while doing little to develop 'soft skills' such as effective communication, teamwork, critical thinking or lifelong learning skills.	Using Africa's disease and demographic transition patterns, we justify its physician competency requirements and contrast these with current training experiences at its medical schools. The TBL pedagogical approach is then described showing how it instills core knowledge and skills attributes required to equip Africa's future doctors with the right competencies for effective practice.	By reviewing literature on Africa's epidemiologic and demographic transitions, we establish the need for increasing the output of well-trained doctors in order to match the continent's complex current and future healthcare needs. Challenges that bedevil African medical education such as outdated curricula, limited educational infrastructure and chronic resource constraints are presented and discussed. Furthermore, increased student enrollments, a trend observed at many schools, coupled with chronic faculty shortages have inadvertently presented specific barriers against the success of small-group active-learning strategies such as Problem-Based and Case-Based Learning.	For its ability to enable a student-centred, active learning experience delivered at minimum cost, we encourage individual instructors and African medical schools at large, to adopt TBL as a complementary strategy towards realizing the goal of training Africa's fit-for-purpose doctor.
10	AbuBbara, N. K., & Worley, J. A. (2018). Leading toward new horizons with soft skills.	USA	This paper aims to highlight the importance of soft skills for leadership and offers recommendations for soft skill development training for the next generation of leaders	This paper aims to highlight the importance of soft skills for leadership and offers recommendations for soft skill development training for the next generation of leaders	A one-size-fits-all approach does not work for soft skills development and measurement. Each soft skill is defined differently and should be assessed based on different behavioral actions. Progress in this area of measurement development will make a great impact on the use of soft skills. The development of assessment tools for the different soft skills across professional disciplines is assumed to enhance other aspects of transformational leadership such as coaching and mentoring.	This paper fulfills an identified need to study how soft skills can be measured and assessed. This is important given that specific skills vary across professional disciplines and organizational contexts.
11	Abraham, T. H., Stewart, G. L., & Solome, S. J. (2021). The importance of soft skills development in a hard data world: learning from interviews with healthcare leaders	USA	Learning healthcare systems have invested heavily in training primary care staff to provide care using patient-centred medical home models, but less is known about how to effectively lead such teams to deliver high quality care.		Semi-structured telephone interviews with healthcare leaders familiar with Patient Aligned Care Teams (PACT) implementation in the U.S. Department of Veterans Affairs (VA). We interviewed sixteen (N = 16) physician, nursing, and administrative leaders at VA facilities located in the upper Midwestern United States. Content analysis of interviews transcripts using template techniques.	Participants described instrumental challenges that they perceived hindered leadership effectiveness, including the supervisory structure; pace of change; complexity of the clinical data infrastructure; an over-reliance on technology for communication; and gaps in available leadership training. Factors perceived as facilitating effective leadership included training in soft skills, face-to-face communication, and opportunities for formal training and mentorship. A cross-cutting theme was the importance of developing 'soft skills' for effective PACT leadership.
12						

1	Reference	Country	Aim an purpose	Design	Data and methods	Main results
	Messum, D., Willis, L., Peters, C. & Jackson, D. (2017). Senior managers' perceptions of employability skills for health services management.	Australia	For the purposes of this research employability skills were defined as skills "not only to gain employment, but also to progress within an enterprise"	Health services management specific employability skills perceived to be important by managers and recent graduates working in the field and their perceptions of skills they need to improve are not readily available in the literature. This research acknowledges the context specific nature or employability skills.	The survey included four Likert scales for interpersonal and communication skills, self management skills, critical analysis skills and job specific skills. Individual employability skills items were gleaned from the literature and from our study of 100 job advertisements for HSM positions in two major NSW newspapers.	There were no statistically significant differences in mean scores for importance of all critical thinking skills items. Furthermore, managers and recent graduates exhibited almost identical rank ordering with priority setting, planning skills and independent thinking the top three, all rated as important to very important.
13	Hendarman, A. F., & Cantner, U. (2018). Soft skills, hard skills, and individual innovativeness.	Germany	This paper contributes to the literature on skills and innovativeness of employees at the individual level. Based on a properly designed empirical analysis, the findings improve our understanding of the relation between soft skills, hard skills and individual innovativeness.	Cross-sectional data of Indonesian firms from different industries are used from an online survey on manager and worker perceptions related to individual innovation performance on the one hand and individual skills on the other hand.	The survey was conducted as an on-line question naire for which about 1000 firms of different sizes and from different industries in Indonesia were approached. The contact addresses were acquired from various sources such as the internet and researcher network databases. Reminding respondents to fill in the questionnaire was an essential part of the survey. On average, each firm was reminded by e-mail three to five times in the period of one month.	Soft skills have a stronger relationship than hard skills with innovativeness, since the estimated coefficient of correlation is always higher in all models.
14						

## Appendix 4: Quality assessment- Qualitative studies

JBI Critical Appraisal Checklist for qualitative research		Y(Yes)	N(No)	U(Unclear)	NA(Not applicable)
1. Is there congruity between the stated philosophical perspective and the research methodology?					
2. Is there congruity between the research methodology and the research question or objectives?					
3. Is there congruity between the research methodology and the methods used to collect data?					
4. Is there congruity between the research methodology and the representation and analysis of data?					
5. Is there congruity between the research methodology and the interpretation of results?					
6. Is there a statement locating the researcher culturally or theoretically?					
7. Is the influence of the researcher on the research, and vice- versa, addressed?					
8. Are participants, and their voices, adequately represented?					
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?					
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?					

Reference	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total	DECISION
Schurink, W. J., Krüger, C., Bergh, A. M., Van Staden, C. W., Roos, J. L., Pickworth, G. E., ... Lindeque, B. G. (2006). Medical students' perceptions of their development of 'soft skills' part I: A qualitative research methodology.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10 X YES	INCLUDED
Bergh, A. M., Van Staden, C. W., Joubert, Krüger, C., Pickworth, G. E., Roos, J. L., ... Lindeque, B. G. (2006). Medical students' perceptions of their development of 'soft skills' part II: The development of 'soft skills' through 'guiding and growing.'	Y	Y	Y	Y	Y	Y	U	Y	Y	Y	9 X YES, 1 X UNCLEAR	INCLUDED
Saylor, J., Hertszenberg, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamaro, C. J. (2018). Effects of a service earning experience on confidence and clinical skills in baccalaureate nursing students.	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	9 X YES, 1 X NO	INCLUDED
Al-Araidah et al. (2016). A Study of Deficiencies in Teamwork Skills among Jordan Caregivers.	Y	Y	Y	Y	Y	U	U	Y	N	Y	7 X YES, 2 X UNCLEAR, 1 X NO	INCLUDED
Abraham, T. H., Stewart, G. L., & Solimeo, S. L. (2021). The importance of soft skills development in a hard data world: learning from interviews with healthcare leaders	Y	Y	Y	Y	Y	U	U	Y	Y	Y	8 X YES, 2 X UNCLEAR	INCLUDE
Hendarman, A. F., & Cantner, U. (2018). Soft skills, hard skills, and individual innovativeness.	Y	Y	Y	Y	Y	U	Y	Y	U	Y	8 X YES, 2 X UNCLEAR	INCLUDE
Ng, L. K. (2020). The perceived importance of soft (service) skills in nursing care: A research study.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10 X YES	INCLUDE

**Appendix 5: Quality assessment- Quantitative studies**

The "Quality Assessment Tool for Quantitative Studies" developed by the Effective Public Health Practice Project (EPHPP)

Reference	selection	study	confounders	blinding	data collection	withdrawals	interventi	analysis	Total	Result	S(Strong)	M(Moderate)	W(Weak)
	bias	design			methods	and	on						
Laari, L., Dube, B. M., (2017). Nursing students' perceptions of soft skills training in Ghana	M	S	W	W	S	-	-	M	STRONG	INCLUDED			
Messum, D., Wilkes, L., Peters, C., & Jackson, D. (2017). Senior managers' and recent graduates' perceptions of employability skills for health services management.	M	S	W	W	S	-	M	S	STRONG	INCLUDED			
Ng, L. K. (2020). The perceived importance of soft (service) skills in nursing care: A research study.	W	S	W	W	S	-	-	S	STRONG	INCLUDED			
Weggelaar-Jansen, A. M., & Van Wijngaarden, J. (2018). Transferring skills in quality collaboratives focused on improving patient logistics.	M	M	W	W	S	-	-	S	MODERATE	INCLUDED			

## Appendix 6: Quality assessment- review articles

JBI CRITICAL APPRAISAL CHECKLIST FOR TEXT AND OPINION			
1. Is the source of the opinion clearly identified?		4. Is the stated position the result of an analytical process, and is there logic in the opinion expressed?	
2. Does the source of opinion have standing in the field of expertise?		5. Is there reference to the extant literature?	
3. Are the interests of the relevant population the central focus of the opinion?		6. Is any incongruence with the literature/sources logically defended?	

Reference	1	2	3	4	5	6	TOTAL	RESULT
Abujbara, N. K., & Worley, J. A. (2018). Leading toward new horizons with soft skills.	Y	Y	Y	U	Y	U	4 X YES, 2 X U	INCLUDED
Sisodia, S., & Agarwal, N. (2017). Employability Skills Essential for Healthcare Industry.	U	Y	Y	Y	Y	Y	5 X YES, 1 X U	INCLUDED
Odongo, C. O., & Talbert-Slagle, K. (2019). Training the next generation of Africa's doctors: Why medical schools should embrace the team-based learning pedagogy.	Y	Y	Y	U	Y	Y	5 X YES, 1 X U	INCLUDED