Self-efficacy and Clinical Performance of Nurses Initiated and Management of Antiretroviral Therapy: Narrative Review

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Abstract:
Self-efficacy plays a major role in the behaviour of a human being by how he/she approaches a goal, task or a challenge so that a desired level of performance is produced. The objective of this paper is to review and analyse literature on self-efficacy and clinical performance among professional nurses regarding quality of care in implementation of NIMART programme.

Methodology:
A literature review was conducted using online resources. Search engines included EBSCO, Google Scholar, Medline, PubMed, Psych info and BIOMED Central articles and journals published between 2007 and 2017. Relevant papers on self-efficacy and clinical performance regarding the implementation of NIMART programme in South Africa were analysed.

Results:
278 papers were identified and 22 eligible papers were selected for analysis. Reviewed literature exhibited that self-efficacy is very crucial in the clinical performance of nurses in the implementation of NIMART. Self-efficacy helps to predict motivation and performance of individuals. Lack of mentoring, support and exposure to clinical practice had negative effect on nurse’s self-efficacy.

Conclusion:
Given the paucity of information on self-efficacy and clinical performance of NIMART in the South African context, future studies are warranted to gain more understanding of self-efficacy in the clinical performance of professional nurses.

Keywords: Antiretroviral therapy, Clinical performance, HIV/AIDS, Literature review, Quality of care, Narrative review, Self-efficacy.

1. INTRODUCTION
Self-efficacy is significant for attaining outcome or goals especially in the implementation of a learned skill [1]. Self-regulatory abilities are central importance for attaining personal goals of the individual [2, 3]. Self-efficacy plays a major role in the behaviour of a human being by how he/she approaches a goal, task or a challenge so that the desired level of performance is attained [4 - 6]. Self-efficacy is also crucial to obtain quality care of client especially those suffering from HIV/AIDS. The basic principle behind Self-Efficacy Theory is that individuals are more likely to engage in activities for which they have high self-efficacy and are competent on those activities; and less likely to engage in activities they are not competent [7]. Therefore, self-efficacy can be improved by accomplishing small tasks and gaining confidence in one’s ability and support from the experienced person or colleague [8 - 12]. Individual’s sense of self-efficacy has an impact on performing a skill which can result in good or poor quality of care for clients [13 - 16]. Therefore, sound decision making in clinical performance is affected by one’s self-efficacy, support and motivation.

There is limited literature in South Africa regarding self-efficacy in implementing Nurse initiated and management of Antiretroviral Therapy (NIMART) programme with a quality outcome. Therefore, this narrative review was conducted to analyse literature on self-efficacy and clinical performance for
quality of care among nurses regarding the implementation of
NIMART programme.

1.1. Nimart Practise

South African Department of Health identified a need to
implement strategies to upskill nurses in the clinical
management of HIV and AIDS, for effective and efficient
management of people living with HIV/AIDS [17]. One of the
strategies identified was the nurse-initiated management of
antiretroviral therapy (NIMART) course. NIMART practise
covers the following activities: (i) clinical aspects of HIV
infection and AIDS i.e. staging; (ii) HIV management in adults
and children, which includes opportunistic infections and their
presentation and management; (iii) Initiation ART in adults and
children, which includes classes of drugs and their modes of
action; (iv) reading and implementation latest SA guidelines;
(v) management of drug-related toxicities and including
treatment failure; (vi) HIV in women; (vii) HIV and
Tuberculosis (TB) comorbidity; (viii) ethics related to HIV and
AIDS; and (ix) palliative care for People Living with Human
Immune Virus (PLHIV).

2. MATERIAL AND METHODS

2.1. Search Strategy

A search was conducted using electronic database EBSCO,
Google Scholar, Medline, PubMed, Psych info, BIOMED
Central articles and journals published between 2007 and 2017
were selected for analysis. Studies were limited to self-efficacy
and clinical performance, written in English language and

2.2. Criteria for Selection of Articles

The retrieved articles were scanned for relevancy by
reading their abstracts. The articles were relevant if these two
key search words, ‘self-efficacy’ and ‘clinical performance’
were appearing in the article. Articles were also included if
they have information on a relationship about self-efficacy and
clinical performance. Only English written articles were
reviewed and analysed. Table 1 shows the inclusion and
exclusion criteria of articles for analysis.

3. RESULTS

The findings pertaining to self-efficacy, clinical
performance and quality of care identified in various articles
are presented in Table 2.

4. FINDINGS

4.1. Quality Appraisal of the Included Papers

The literature searched on self-efficacy and clinical
performance produced 278 published papers (Fig. 1). Forty-one
duplicate papers were removed and 211 papers do not have
information on self-efficacy, clinical performance, and quality
of care, HIV/AIDS, antiretroviral therapy and literature review.
Ultimately, 22 published papers were identified which meet the
criteria for inclusion.

The findings of the published papers were highlighted in a
narrative text (self-efficacy, clinical performance and quality
of care) (Table 1). From included reviewed papers, 12 of the
papers used quantitative approach [3, 6, 8, 17, 25] and 10
papers used qualitative approach [26 - 36] These papers
examined and narrated self-efficacy and clinical performance
in different countries. The qualitative studies in this study had a
common factor there is a relationship between self-efficacy and
clinical performance. Self-efficacy plays a protective role when
the person is experiencing emotional exhaustion and high stress
conditions [27, 33, 34] Therefore, a person who is emotionally
exhausted has difficulty in performing the usual duties. Several
studies [20, 28 - 31] indicated that shortage of personnel to
perform specific duties at work place negatively affect self-
efficacy of the nurses, and thus, can lead to poor performance
due to demotivation. Other studies had evidence that
mentoring, exposure to clinical skills, practise and support of
personnel improves self-efficacy [3, 6, 8, 18, 21, 26, 32 - 34].
There is also empirical evidence that quality of care for the
clients is affected if the nurses have low self- efficacy [19, 34,
36].

5. DISCUSSION

This narrative review of literature revealed that nurses do
not have confidence to initiate clients on ART after NIMART
training course. A need for on-the-job mentorship and support
in order to maximise clinical outcomes related to HIV and
improve self-efficacy of the professional nurses was suggested
[17]. Therefore, mentoring and support of the professional
nurses after training is important for nurses to develop self-
efficacy in the initiation and management of clients on ART for
better clinical outcomes. Nurses as the largest group within the
multidisciplinary team, have a vital role to play if success is to
be achieved [37]. Professional nurses are ideally committed to
the broad aims of quality care; and their main concern to
provide high standard services and to meet the needs of
individual service users, their families, and communities [38 -
40]. Self-efficacy influences the task employees choose to
perform and the goals they set for themselves [20, 21, 30, 31,
41]. Self-efficacy can affect people’s behaviour positively or
negatively, and this behaviour, may have an impact on one’s
performance and clinical outcome for the clients [10]. Self-
efficacy and clinical performance have relevancy in health care
practices. These practices are gained through knowledge and
skills, therefore, the expectation is to have good clinical
outcomes [7, 32]. Professional nurses need to be well trained,
**Fig. (1).** Papers reviewed for analysis.

**Table 1. Inclusion and exclusion criteria.**

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
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<tbody>
<tr>
<td>Articles published in English</td>
<td>Articles published in other languages</td>
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<tr>
<td>Articles that have information on self-efficacy clinical performance and quality of care, HIV/AIDS, antiretroviral therapy, literature review,</td>
<td>Articles that have no information on self-efficacy, clinical performance and quality of care, HIV/AIDS, antiretroviral therapy, literature review</td>
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<tr>
<td>Published articles on peer reviewed journals</td>
<td>Articles that were not published</td>
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<tr>
<td>Setting</td>
<td>Design</td>
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<tr>
<td>Vhembe, South Africa</td>
<td>Quantitative, Descriptive, cross-sectional</td>
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<td>Shiraz, Iran</td>
<td>Quantitative, cross-sectional</td>
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<td>Shiraz, Iran</td>
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<td>Delhi, India</td>
<td>Qualitative, Explorative</td>
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<tr>
<td>Tennessee, USA</td>
<td>Qualitative, descriptive</td>
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<td>Halifax, Nova Scotia</td>
<td>Quantitative,</td>
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<td>Oshikati, Namibia</td>
<td>Qualitative Descriptive design</td>
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<td>Shiraz, Iran</td>
<td>Qualitative, content analysis</td>
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<td>Setting</td>
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<td>Mwanza, Malawi</td>
<td>Qualitative, descriptive</td>
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<td>Bonafide Benquet, State University, Philippines</td>
<td>Qualitative, descriptive design</td>
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<tr>
<td>Al-Quds University, Palestine</td>
<td>quantitative descriptive, explorative</td>
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<td>Limpopo Province, South Africa</td>
<td>Quantitative, descriptive, cross-sectional</td>
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<tr>
<td>Hospital, United States</td>
<td>Quantitative, Purposive</td>
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<td>Australia and New Zealand</td>
<td>Qualitative, secondary analysis of interview</td>
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<td>Bauchi Nigeria</td>
<td>Quantitative, Descriptive design</td>
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<td>Namibia</td>
<td>Quantitative descriptive survey</td>
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<td>Nine European countries, Cyprus, Belgium, Finland, England, Ireland, Italy, Netherlands, Spain, Sweden</td>
<td>Quantitative design</td>
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<td>Iran</td>
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knowledgeable, confident and have clear job description for better clinical management of clients. Self-efficacy is not only needed on rational decision making, but also to build trust with clients in clinical management of HIV/AIDS affected clients [23]. Trust is important, especially in this era of HIV/AIDS prevalence because trust can influence a client to behaviour change. People with positive self-efficacy display mastery of their environment and more confident in acting safe and competent in challenging situations. Mastery experience is the most influential source of self-efficacy because it provides the most authentic evidence of whether one can master a skill and what it takes to succeed or reach a goal [22, 42]. Therefore, nurses who are the backbone of the Department of Health, need to be upskilled, motivated and supported to have confidence in implementing NIMART.

5.1. Negative Effects of Self-efficacy

Lack of social support, knowledge, practice, shortage of staff and work-load can affect self-efficacy negatively. These challenges can affect the quality of care delivered by the nurses for the clients [29, 33]. Lack of motivation and absence of hygiene factors were also identified as aspects that can lower self-efficacy of nurses consequential to poor clinical performance [20]. Lack of confidence in professional nurses in implementing NIMART can also lead to poor management of clients. People with lack of confidence exhibit low self-efficacy which interfere with initiation and pursue of intentions of NIMART programme [8]. Therefore, experience, clinical practice, motivation, supervision, support and knowledge are needed to develop the nurse’s confidence and morale [7, 42].

5.2. Positive Effects of Self-efficacy

Learning has a positive effect on self-efficacy in clinical performance of nurses as it increases their self-efficacy [8, 43]. Self-efficacy has been associated with enhanced motivation, strong self-direction and goal orientated. Therefore, positive self-efficacy will enhance clinical performance. Self-efficacy is also gained by modelling achievements from other people thus gaining self-efficacy in performing a task. Peer education, mentoring and working with patients also play a significant role in building self-efficacy in professional development [13, 44]. This explains that learning from peers in clinical practice is an important aspect in building self-efficacy. Therefore, sufficient skill and ability to perform a task are very important to enhance one’s self-efficacy. High level of self-efficacy will result in high level of work performance; and there is a relationship between self-efficacy and work performance [19, 27]. High self-efficacy also plays a protective role from experiencing more emotional exhaustion when in stressful condition [27]. Therefore, self-efficacy is very crucial in clinical performance of health workers. Self-efficacy and resilience at workplace is a positive aspect in clinical practice.
and can enhance confidence [26]. Employees that are motivated, well skilled, involved in practice are likely to perform to their best level, proficient and resourceful than those with low self-efficacy.

5.3. Comparison of South African NIMART with Other Countries

HIV/AIDS continues to be a global public-health problem, therefore NIMART is the best strategy identified to improve access to ART care. The Johns Hopkins University School of Nursing embarked on a transformative curriculum overhaul to integrate HIV prevention, treatment, and care into the Adult/Geriatric Nurse Practitioner Program. There is a need to implement strategies to upskill nurses in the clinical management of HIV and AIDS, for effective and efficient management of people living with HIV, in the South African context [17]. Therefore, a training on NIMART was conducted for nurses at the University of KwaZulu Natal. Upskilling nurses by training was conducted to ensure that they have the required knowledge to implement NIMART for access of care by clients [42]. However, there is a gap in implementing NIMART. The nurses indicated they need mentoring, support and practice to build confidence in order to manage those affected with HIV/AIDS.

Notwithstanding the implementation of NIMART in Kenya, nurses have gaps in training, competency, and practice in HIV care and treatment. It was recommended that further investment in nurse capacity building is needed to bridge the gaps and prepare nurses to provide high-quality, comprehensive HIV care and treatment [42]. Therefore, if the nurses are not well trained, their self-efficacy will be compromised by incompetency, resulting in poor management of the clients.

In a multi-country study conducted from 2007 to 2011 in five countries (Angola, Burundi, Lesotho, Mozambique and South Africa), successful ARV roll-out was observed, despite HRH shortages, skill scale up [44], which suggest that these countries have adapted a similar model of upskilling and mentoring as an antidote in speeding up the implementation of NIMART for the purpose of building self-efficacy in nurses.

CONCLUSION

This narrative review has shown that there are gaps in nurses’ skills and self-efficacy regarding the implementation of NIMART. Experiential learning, support, supervision, skills update, mentoring and peer education are fundamental aspects to enhance self-efficacy and quality improvement in the management of clients by professional nurses. Several studies have alluded to the fact that self-efficacy is the motivation that a person needs to accomplish a task or a goal. Therefore, there is a need to motivate and build self-efficacy among professional nurses, especially in South Africa.

LIMITATIONS

Risk of biasness due to only two researchers viewed the literature for this study and only English written papers were included in the study.

LIST OF ABBREVIATIONS

| AID(S) | Acquired Immune Deficiency Syndrome |
| ART | Anti-Retro Viral therapy |
| ARV | Anti-Retro Viral |
| HIV | Human Immune Virus |
| NIMART | Nurse Initiated and Management of antiretroviral therapy |
| NCSES | Nursing Competence Self-Efficacy Scale |
| PLHIV | People Living with Human Immune Virus |
| TB | Tuberculosis |

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The authors declare that they have no competing interest, financial or otherwise.

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