

Experience of academic remediation in a South African medical undergraduate programme — the voice of remediating students

A E Ugwuanyi, MFam Med ; P Sodo, PhD; R Cooke, MMed Fam Medicine

Unit for Undergraduate Medical Education, University of the Witwatersrand, Johannesburg, South Africa

Corresponding author: A E Ugwuanyi (anastasia.ugwuanyi@wits.ac.za)

Background. The purpose of remediation is to provide targeted support and interventions to individuals who are struggling academically, providing support for the improvement and achievement of learning goals.

Objective. The purpose of this study was to explore the perceptions and experiences of undergraduate medical students regarding academic remediation within the Nelson Mandela Fidel Castro (NMFC) final-year integration programme at the University of the Witwatersrand (Wits) and, by so doing, present a Global South narrative around providing remediation as a pedagogical intervention for medical education.

Methods. In a qualitative exploratory study design, in-depth interviews were conducted with Wits-NMFC students as part of a wider study that included focus group discussions with clinical educators with thematic analysis.

Results. The findings revealed a need to deconstruct the meaning of remediation in a student-centred manner, clarify the procedural approach to successful remediation for students, provide student-centred support, and consider the multidimensional reasons for poor academic performance by students through an individualised approach.

Conclusion. Holistic and structured remediation of learners with identified gaps is crucial in health profession education to achieve the outcomes of clinically competent healthcare providers. A comprehensive approach that is student-centred and addresses individual factors that impact academic performance is imperative to a successful remediation programme.

Keywords: academic remediation; Nelson Mandela Fidel Castro collaboration; medical education; University of the Witwatersrand

Afr J Health Professions Educ 2026;18(1):2728. <https://doi.org/10.7196/AJHPE.2026.v18i1.2728>

Remediation in medical education refers to the process of assisting learners who are at risk of failing or not completing their training to become physicians. This challenge exists in medical education, as it does in other professional fields, and involves the need to help struggling trainees correct their course towards achieving competence.^[1]

The purpose of remediation is to provide targeted support and interventions to individuals who are struggling academically or professionally to help them improve their performance and achieve their educational or career goals.^[2] It aims to identify specific areas in which an individual is struggling and to target those areas for improvement. By recognising and addressing these weaknesses, individuals can develop a stronger foundation and enhance their overall competence.^[2] It offers individuals access to additional support, resources, and opportunities that may not be available in regular educational or professional settings. This can include personalised instruction, tutoring, specialised programmes, or supplementary materials, all of which are designed to provide targeted assistance.^[2] Academic remediation helps students bridge gaps in their knowledge or skills, hindering their progress. By identifying these gaps and providing tailored holistic interventions, remediated students gain academic insight, improve confidence in approaching assessments and develop the necessary competencies to succeed. Struggling students often face self-doubt and a lack of motivation. Remediation provides a supportive environment that encourages individuals to overcome challenges, build confidence, and regain their motivation.^[2] This renewed self-assurance can have a positive effect on their overall performance and future success.

Academic remediation plays a crucial role in ensuring that students who are struggling academically or professionally have an opportunity to catch up and succeed. Remediation 'equalises' the academic playing field by providing additional resources and support for academically struggling learners to overcome barriers and achieve their full potential.^[2]

Previous studies reported the significant impact of supporting struggling students in the eventual completion of academic projects through remediation. Winston^[3] reported that 91% of students who underwent the process of remediation passed the first semester at their institution following the process of remediation. Unsurprisingly, a study that explored students' attitudes towards remediation in the Global North in several institutions reported initial negative attitudes from students who were involved in remediation; students described remediation as an embarrassing process that was associated with 'being dumb'.^[4]

The University of the Witwatersrand-Nelson Mandela Fidel Castro (Wits-NMFC) programme aims to integrate indigenous South African (SA) medical students who study in Cuba for 5 years and then return to SA for an 18-month academic integration programme pre-internship. Since 2018, the integration programme at Wits has implemented academic remediation to help underperforming/borderline students who do not meet academic and clinical competency criteria for progression. Students are identified for remediation on the basis of assessment criteria conducted during discipline rotations, with clinical educators or preceptors flagging underperforming students. Students can also self-refer if they believe that they need remediation, although this seldom occurs. The criteria for

qualifying students for remediation are based on the outcomes of both clinical and theoretical summative assessments. Eligibility for remediation can be for either or both the clinical and theory components of a discipline.

The remediation process begins with a general group orientation, where students are provided with information on the process and criteria. Following programmatic assessments, students receive detailed breakdowns of their marks, and the possible outcomes include 'Theory remediation', 'Clinical remediation', 'Pass', or 'Failed rotation', on the basis of documented criteria. Students who qualify for remediation are invited to deliberate on mentoring and learning support for 3 - 4 weeks within the 12-month period of their final year. They undergo reassessment for the components they have remediated, and a logbook with expectations is provided to guide the process.

The remediation programme has shown positive results in terms of improving student throughput. This study aims to add to the growing body of literature concerning student academic remediation support by exploring the experiences and perceptions of students.

Methods

Study design and setting

This study used an exploratory qualitative design to investigate the perceptions and experiences of learners and clinical educators regarding academic remediation, with a focus on capturing their first-hand experiences. This article reports the data collected from the students with references where necessary to the data from the clinical educators.

The study was conducted at the University of the Witwatersrand, Johannesburg, SA.

Study population

All NMFC collaboration 5th- and 6th-year students registered in the programme who have participated in the process of academic remediation were eligible to be included in the study. These were students who were part of the programme in the 2021 - 2022 academic session.

Sampling and recruitment of participants

A purposive sampling technique was employed to recruit participants for the study. Initial invitation emails, containing detailed information about the research, were distributed to all students who had undergone remediation during their integration period at the university in the 2021 - 2022 academic year. These emails were disseminated through the respective programme coordinators. Twenty-eight students expressed interest and responded to the email. The email detailed the research objectives and clarified that participation was voluntary. Those who wished to take part were encouraged to reply with their contact information to be considered for inclusion in the study. Of the 28 participants who had expressed interest, only 10 responded positively. The interview dates were scheduled on the basis of the availability and responses of the students.

Data collection process

Semi-structured in-depth interviews (IDIs) were conducted with the students to explore their experiences and perceptions regarding the academic remediation programme. Data collection was conducted by researchers external to the programme to avoid bias. Prior to the interviews, the participants were provided with an information sheet outlining the purpose of the study and their rights as participants. They were then

asked to provide written informed consent for participation and for the audio recording of the interviews. With their consent, all interviews were recorded. The interviews were conducted in English and lasted between 20 and 45 minutes. Eligible participants who consented to participate in the study were given the choice of being interviewed either in person or virtually by the research assistant. The questions asked during the IDIs focused on participants' perceptions and real-life experiences with the academic remediation programme. Throughout the data collection process, detailed field notes were carefully recorded. These notes included descriptions of events, dialogues, and observed behaviours during the interviews, as well as the researcher's own reflections on these interactions. The interviews were concluded until saturation was reached.

Data analysis

The digital recordings of the interviews were transcribed verbatim by an independent transcriber. Following transcription, the first and second authors (AU and PS) listened to all the audio recordings while reading the transcripts to ensure completeness of the data. AU and PS conducted thematic analysis to analyse the data, following the process detailed by Braun and Clarke:^[5] gaining familiarity with the data; generating initial codes or labels; searching for themes or main ideas; reviewing themes or main ideas; defining and naming themes or main ideas; and producing the report.^[5] The transcripts were read repeatedly for familiarisation with the data by the authors. This permitted the identification of ideas, making observations, and obtaining insights and inferences. Upon familiarisation with the data, two researchers (AU and PS) generated initial codes to guide the development of the coding template that was used for identifying the remaining codes. Coding was conducted until no further codes were identified and the research team felt that the ideas from the interviews were fully covered. Indexing and charting of the data involved merging the codes into patterns of similarities and differences and aligning them to themes and subthemes. The data were integrated as we assessed the links among data from participants; this was done and finalised in a meeting by the researchers (AU, PS and RC). To ensure the dependability of the findings,^[6] the researchers cross-checked the entire analysis process; any discrepancies were resolved by the coauthors. The authors (AU, PS and RC) reviewed the final codebook.

Ethical considerations

Ethical approval to conduct the study was obtained from the Wits Medical Human Research Ethics Committee, ref. no. M211180. During the recruitment process, participants were reassured that the study was entirely voluntary and that their information would be kept confidential. On the day of the interview, the research assistant obtained written informed consent from the respondents for both their participation in the study and for audio-recording, and consent was signed and emailed prior to the virtual interviews. To safeguard participants' anonymity, codes were used instead of names.

Results

A total of 10 students, 6 males and 4 females, participated in the study. All the students who participated in the study had undergone a process of remediation in their academic integration journey at Wits.

The overarching themes that emerged from the data analysis, linked to the study objectives of perceptions of remediation, reasons for remediation,

and experiences with remediation, are represented in Table 1 and Fig. 1 below.

Outcome related (perceptions of remediation)

The participants described remediation as an opportunity to improve academic and clinical competence for students who are in between passing and failing.

Basically, how I understand remediation is that it's a program that has been set by Wits which is set to just improve a student's academic experience or clinical experience because it's something in between a pass and a fail because it's not a fail. It's not like a repeat but it's not a pass either. It means that there's just something that you just need to work on. So, it's that period that's just in between the passing and the failing. (STU 3)

One participant described remediation as a second chance for those who did not do well academically, to save them from repeating the year. However, there was an inference to remediation as the 'opportunity to rewrite an

assessment', not the actual process of knowledge and skill competency upgrading:

Second chance, that's what I would call it. It's a second chance because just takes one point less for you to repeat the rotation the next year and one point to be given that chance to actually rewrite and redeem yourself. So, yeah, I'll call it a second chance. (STU 4)

Some participants understood remediation as 'the journey' that the students embark on before rewriting the subject that they are remediating. Describing in detail the step-by-step milestones as they had experienced.

So, in the process of remediation? A student is required to go back to the clinical spaces, for a set period of time and to revisit certain things, like clinical experiences. Like basically, you get a logbook that is like a downsize logbook to the normal logbook that we have during our 8 weeks rotation. So, this one is just for 2 weeks where you have to present yourself to the clinical space every day, present cases and do procedures and [as] attend tutorials as well. And yeah, just show yourself up clinically and to just match up where they might

Table 1. Description of the study framework

Study themes	Description
Perceptions regarding remediation	Participants' understanding of remediation, including their attitudes, beliefs, and opinions
Reasons for remediation	Description of factors that led to participants not performing well academically
Experiences of remediation	Describes the participants' journey through the remediation process

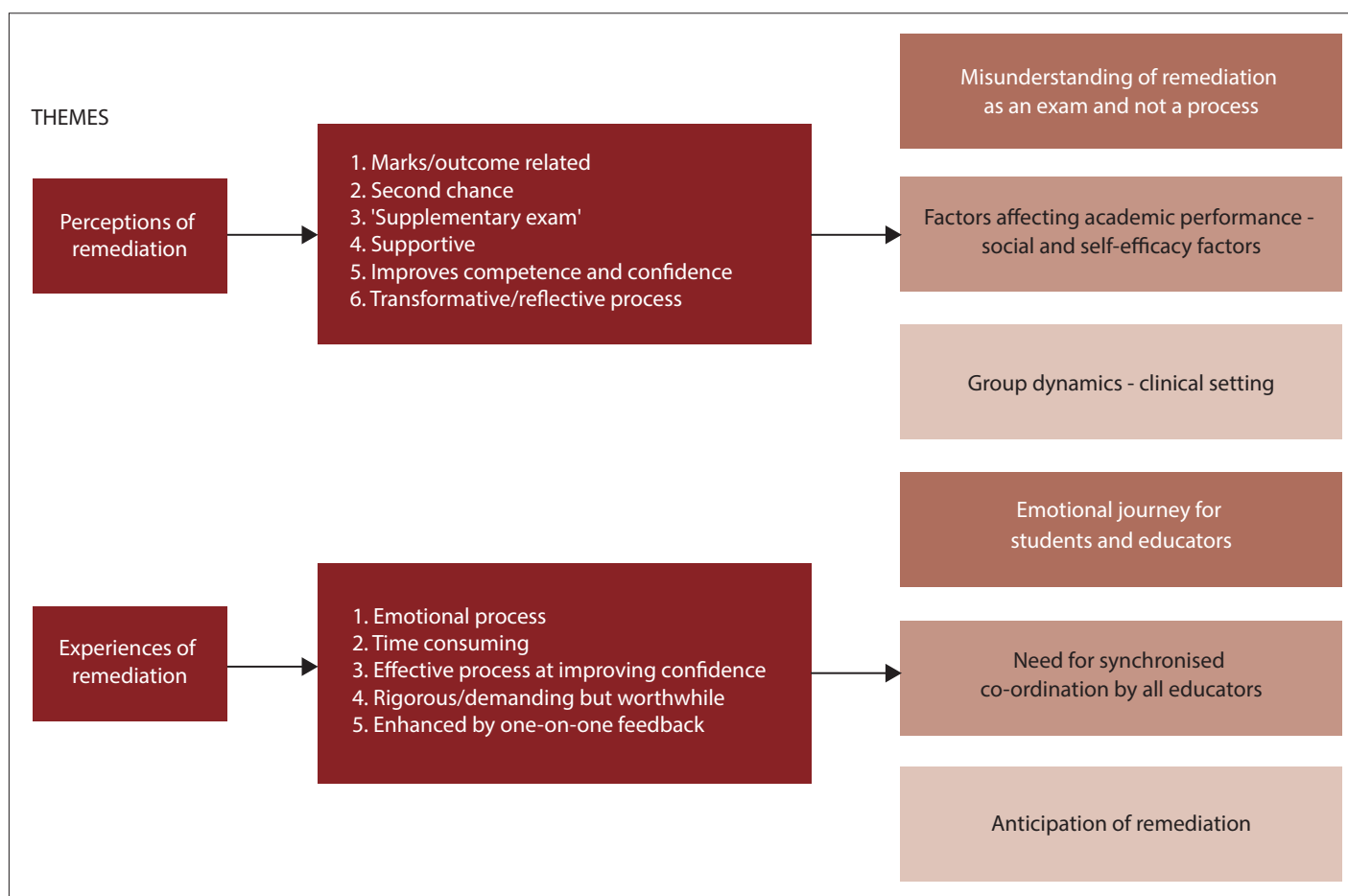


Fig. 1. Pictorial representation of themes from the analysis of data.

have been, some gaps in the studying that resulted in a person not getting the pass mark even though they didn't exactly get the failure... it... so as to repeat so yeah. (STU 3)

All the participants linked remediation to criteria that were associated with outcome marks as well as performative activities, such as logbook completion and subminimum marks with the clinical viva assessment – an oral examination where educators present clinical management scenarios and students are expected to demonstrate clinical reasoning and critical thinking in their responses.

You have to pass your clinical, the logbook part, right. That part you have to pass it. There's no remediation for it if you fail it, you just repeat it right then. The two exams, the Viva and the theory part, the MCQ part. So, on the Viva pass mark 60 you have to reach 50 to qualify for remediation. (STU 4)

I only saw those results and yeah, they told us prior, like, okay, the minimum, if you don't meet the minimum requirements that means you will be remediating. (STU 1)

Conversely, some participants were confused about remediation, and they mentioned an understanding of 'remediation' as another moniker for supplementary examinations. At Wits, the policy on assessments for undergraduates in preclinical disciplines recognises a supplementary examination requirement for students on the basis of a cut-score or deferral qualification criterion.

Well, in our program, there's never really a mention of supplementary exam. Umm, we use the remediation term. So, I understood it as the same thing, just a different name. (STU 3)

Experience of remediation – procedural and available support

On the basis of participants' objective experience of the remediation process, narratives of the presence or lack thereof of a supportive component to the faculty response or resource availability in remediating their learning that had an impact on their experience of remediation were expressed. Certain participants also narrated their 'experienced understanding' of what remediation involved.

OK, and the process starts with doing some hours in the clinical setting. You have to attend. You have to see patients. You have to clerk patients and to do calls, and you will be given a remediation logbook. So, you use it to record all the patients you see during those hours in the hospital or during those calls. And then after that you go into the remediation or examination. Yeah. Which may be the Viva or MCQ or both, depending on what are you supposed to remediate. (STU 9)

Ok. I think what happened with us in or what we did or what we actually went through during this remediation.... I think if all the disciplines can adopt that style, it will work like whereby the clinical educator will specifically... you know will look or will actually dedicate time for those students who are remediating to show that, you know he cares about them making it. You know, giving them the tips and what they should answer and how they should answer. There are some clinical educators they don't... they don't just care... (STU 6)

Reasons for remediation

Some students who remediated mentioned that although they believed that they did well in other academic scheduled rotations, they understood that they were not meeting outcome expectations in the subjects that they remediated.

My overall performance it was... I don't know what to say. It was OK, it was masked [sic] a lot with these remediation processes with those subjects

that I had issues with, but the other ones were fairly OK, I did above average, I think. (STU 3)

Uh, it is always written in the results, now you have to be below the passing mark which is 60% but not below 50% and I think that's for Viva... that also for the other two is where your total mark has to be. If you got a little bit below 60% but not below 50 which is 50 or above, then you meet the remediation criteria. It's always in their results. So, we don't really memorise it; whenever you are looking at your results, you also check ... because it's already in the results. (STU 9)

Some were surprised that they had to go through remediation; they believed that they had given their best, deserving of a favourable outcome.

When I came to Wits, I had that thing that I'm going to give it my best and make sure I finish in record time. I don't want to repeat like, and that's what I've been doing. But clearly it was not enough at some point because I keep lagging with 3 points, 2 points, 5. But yeah, I was working, anticipating failing? No. (STU 4)

One participant felt that the subject-discipline that he was remediating was the easiest of all his subject-disciplines, and he never anticipated remediation:

So, I didn't anticipate needing remediation, especially for the subject that I was remediated because it's seen as one of the easy ones. (STU 3)

The students cited different challenges that led them to not perform well academically and to require remediation. Some had challenges transitioning from Cuba to SA; they mentioned that when they returned to integrate their final year in SA, they were overwhelmed with information that demotivated them and ended up requiring academic remediation as a result.

So last year, I was not that motivated honestly; I started lacking [sic] a lot of professionalism and all those things because I felt like, I had gotten back from Cuba, and I was bombarded with all this information. (STU 2)

Most participants compared how things were done in their Cuban medical education system experience with their experience at Wits medical school in SA.

Yeah. When we got to Wits. Yeah, everything just felt different the whole medicine that I was learning in Cuba. I felt like I was starting from the ground here and that has a lot to do with the language. But not just the language now and a lot of other things that we were not seeing in Cuba that we're seeing here. And just even the whole style, the whole approach to the practice of medicine, it's different. Cuba. Is it different country from a [different] continent; it's just doing things on its way, and South Africa is doing its things on its way so. Again, that was a challenge. It's a huge challenge. Yeah. I think generally in life if you have to change from one institution to another, it is never gonna be smooth. It's not gonna be like you are just continuing in the same institution. You're always gonna see some differences. So, you can imagine it's not like changing from UCT to Wits, you are from University of Havana, from another continent, from another language, from another style of medicine. And you coming from that, I'm going to say it was different and it was difficult. And for some of us, you have managed to do well, and I think I'm one of those who are finding it very difficult, but I'm trying my best to adapt. (STU 9)

A participant attributed the poor academic performance to group dynamics, citing that in their medical year of integration at Wits, SA, they have larger clinical groups than their system in Cuba does, which caused them to fly under the radar, and in so doing, they did not put in the due diligence.

But yeah, it was different. It was a different setting as well because... but the group in Cuba was smaller. We had a smaller group than we did in, in

Wits when I was doing physio, so it was a bit different as to how the material is delivered and how you have to present yourself in the settings and the other settings that don't allow you to hide in the background because you like you're a smaller group so you have to like present yourself and so forth. (STU 3)

Another participant blamed their poor academic performance on the perception that they were 'not exposed to the content that South African trained students are exposed to', and they felt isolated from them with the different integration programmes. They further suggested that 'mixing' both groups could make a difference:

I feel like the co-ordinator, they should integrate us with the Wits students because we are not exposed to what the like GEMP (Graduate Entry Medical Programme) students... we don't know what they're doing. What's expected? We just do our own thing. We integrate, they mix us together, that would be really helpful for us. Especially when we are in the hospitals, so it will be much easier if we are mixed together. (STU 1)

Another narrative that was cited as a reason that led participants to underperform academically and end up requiring remediation was the psychosocial strain of separation from their families while in Cuba. The participants were away from home for many years, and on return to SA, they travelled home more frequently as they were closer to their families, resulting in the perception that those who went home used up more of their study time when they were travelling home.

I don't know, because I used to go home every now and then. I used to feel like, OK, going home maybe affected me. I should have stayed and studied. Yeah. So, I started blaming family. (STU 1)

On the other hand, some participants knew that their poor academic performance was due to them being not well prepared for exams. For example, one participant said, 'I don't have any other particular reason, but I think I was not prepared enough for that exam.' (STU 2)

Similarly, one student admitted to not engaging during the clinical rounds, resulting in a less than satisfactory performance that required remediation.

It really went down because I was not really participating anymore, but, during ward rounds in the clinics, I wasn't really participating anymore. (STU 1)

Experiences with remediation

The participants described their academic remediation experience as difficult because of the perceived increase in the amount of work, as remediation occurred in parallel with ongoing clinical rotations.

It's tough in a sense that because obviously you have to put in two times the work; because you want to make sure that you get past it. (STU 5)

One participant described her experience when she was first told that she was remediating as unpleasant and that she kept it to herself: 'The feeling is not nice. I couldn't even talk to anybody. I was just alone with the marks.' (STU 1)

Some who were not expecting an outcome of remediation became emotional upon receiving the news.

I was obviously... I was a bit emotional, obviously because I felt like, oh, I thought I was ready for the exam but then when the results came in... I was shocked, but it happens. I mean, maybe I made mistakes when I was uh, you know, cause, sometimes you make mistakes, and you are not even aware. (STU 2)

Other participants raised their frustration with ending up requiring remediation just for failing to meet summative assessment requirements by 'only one mark':

I didn't anticipate it, I honestly didn't, even after going through the exam, and I didn't think that it would end up being a remediation. So yeah, it was

quite shocking to learn. But then I was like, OK, let's just put ourselves together and go back and then it came out the same way, and the worst part was that it was a one-mark thing. So, it was always very frustrating that it's so close, yet so far away, you know. (STU 3)

Students' perceptions of an ideal remediation programme from their experience

The students had ideas from their experiences with regard to the 'ideal remediation programme'. A qualification criterion that falls away and provides opportunity for all who have not met the pass outcome to remediate was mentioned by participants.

Yes, so my ideal remediation process would be that first of all, as I've already mentioned: No one will have to [be] qualify for remediation. Everyone who did not do well, irrespective of the marks they got already falls under remediation... (STU 6)

A student-centred remediation that allows for flexibility and gives 'control' to the student was expressed as a feature of an ideal remediation programme. This is in contrast to a faculty-driven process that allocates a specific period for student engagement. Individual, one-on-one sessions to understand a student's reasons and why they are where they are is suggested as opposed to a faculty-driven 'remediation action plan'.

I think it should be more centred towards what the person is really having an issue with so that they can work around specific things. (STU 9) Ok, another thing that I would like to highlight is that the periods of remediation, I feel like someone should really... **students should be given a privilege to choose when do they want to remediate; not that the school tells them...** so then students should really be given a time like any day of the month and of the weekend of the year to complete the logbook and then to do the [remediation]. There shouldn't be a designated time. (STU 6)

Maybe... have a one-on-one with the students who are remediating. And try to find out what are their difficulties, why, what are they struggling with? Why did ... how did they end up there? And like if you have gone, unless if you are going to tell more. No, I didn't study enough. Then you just need to study. But what I also noticed with people who were remediating [they] are hardworking people, people who study a lot and I feel like just seeing, we're going to give you tutorials the Saturday and this Saturday and the Saturday was not fair because like me, I would actually log in into the tuts that just for attendance. (STU 4)

Discussion

Remediation in medical education is a concept that weaves in multiple ontological, theoretical positions. Notably, the theory of transformative learning underscores the potential of at-risk medical learners to process the disruption of knowledge and/or competence gaps and apply themselves within programmatic remediation for academic success. This research focused on the grey area between a programme framework for remediation and effective implementation from a student's perspective. An objective of this research was to explore students' perceptions of the current practice of remediation within the NMFC programme at Wits. The fundamental challenge of programmes is that of integrating students who have learned medicine in a different geographical, curricular, and sociocultural context, preparing them for practice within the SA health system.^[7] Challenges such as Spanish-to-English text and speech translations within a medical background and exposure to clinical workplace-based learning pose challenges to grappling with these challenges, and students' outcomes

The effects of the transition in the curriculum between Cuba and SA, the dynamics in the workplace-based learning spaces, which varied among the participants depending on site allocation, different 'geosociocultural' environments of learning, and 'poor participation in workplace-based learning' (*For me, remediation means that a student has not been able to perform satisfactorily to get enough results to allow them to proceed to another rotation or his performance has not been satisfactory.* (STU 5)), were some of the factors cited for underperformance leading to remediation. 'Underestimating the workload' (*It's tough in a sense that because obviously you have to put in two times the work; because you want to make sure that you get past it. I'll talk for myself. Yeah, it was it was a bit tough.* (STU 5)) required to achieve knowledge and clinical competence were cited as reasons leading to subminimum outcomes and subsequently a qualification for academic remediation. The practical implications of diversity in the learners' explanations of their academic underperformance support the need for targeted and structured psychological and learning support to scaffold the peri-remediation period. Medical students emphasise the importance of reflecting on and internalising individual determinants of academic success.^[9] Programmatic structuring of academic and psychological support is therefore imperative.

Prevalent in unpacking the experience of remediation were emotive expressions of negativity and frustration, symbolic of perceptions related to academic outcomes and which had an impact on the process of remediation and its outcome.^[10,11] Strategies linked to the faculty development of educators, psychological and academic support conditioning, the structural process of remediation and resource availability form part of the components of successful remediation. Structurally integrating or mainstreaming remediation into medical education programme planning, as opposed to having it as a reactive response to students' performance, enhances its acceptability and successful implementation.

Impact of research on the Wits-NMFC remediation programme

The impact of this research in unpacking the experiences of students and clinical educators navigating academic underperformance and managing a timed response to remediate the student's learning experience has added depth to the pedagogical practice of remediation within the School of Clinical Medicine at Wits.

Reconstructing failure and the outcome of failure to a more nuanced experience of an opportunity to remediate knowledge and skills competency gaps is an exploratory space for pedagogical engagement. The curriculum conversations around remediation and destigmatising failure or underperformance are ongoing, and after this research, both students and faculty are rethinking academic remediation as more of a process and less of an assessment outcome categorisation.

Some improvements to the process resulting from this research include the development of a portfolio of learning for the remediation process and a flow diagram guiding the process represented in Figs 2 and 3.

Conclusion

Having student feedback on the programmatic process that frames remediation is invaluable in planning and implementing support for at-risk undergraduate medical learners. This provides a long-term culture of support that is necessary in the arduous journey of graduating medical practitioners.

Impact evaluation of the pedagogical process of a remediation programme is important, with flexibility that accommodates individualising the at-risk student's support as the central focus. This research provides insight into factors such as psychosocial factors, the emotional impact of remediation, teaching/learning and assessments in remediation, environmental dynamics and their importance for academically vulnerable students.

The information from this research enabled faculty development of remediation as a multilayered process of student engagement that goes beyond a second chance at assessment but develops a culture of feedback in learning and a measurable pathway of direction for students and faculty to engage with.

Declaration. None.

Acknowledgements. The dedication of the research assistant Ms Kelebogile Mothupi is acknowledged. Invaluable lessons were learned from students and clinical educators in the Nelson Mandela Fidel Castro Programme at Wits from 2018 to 2024.

Author contributions. AU conceptualised the research, participated in the design and data analysis and interpretation, and drafted and wrote the final manuscript. PS handled participant recruitment, data analysis and interpretation and contributed to the drafts and final write-up. RC participated in the study design and data analysis and reviewed the initial manuscript.

Funding. None.

Conflicts of interest. None.

1. Kalet A, Guersio J, Chou CL. Twelve tips for developing and maintaining a remediation program in medical education. *Med Teach* 2016;38(8):787-792. <https://doi.org/10.3109/0142159X.2016.1150983>
2. Ellaway RH, Chou CL, Kalet AL. Situating remediation: Accommodating success and failure in medical education systems. *Acad Med* 2018;93(3): 391-398. <https://doi.org/10.1097/ACM.0000000000001855>
3. Winston K. Core concepts in remediation: Lessons learned from a 6-year case study. *Med Sci Educ* 2015;25(3):307-315. <https://doi.org/10.1007/s40670-015-0149-z>
4. Bachman RM. Shifts in attitudes: A qualitative exploration of student attitudes towards efforts of remediation *Res Teach Dev Educ* 2013;29(2):14-29.
5. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitat Res Psychol* 2006;3(2):77-101.
6. Lindheim T. Participant validation: A strategy to strengthen the trustworthiness of your study and address ethical concerns. In: *Researching Values: Methodological Approaches for Understanding Values Work in Organisations and Leadership*. New York: Springer, 2022:225-239.
7. Donda BM, Hift RJ, Singaram VS. Assimilating South African medical students trained in Cuba into the South African medical education system: Reflections from an identity perspective. *BMC Med Educ* 2016;16(1):1-7. <https://doi.org/10.1186/s12909-016-0800-4>
8. Watkins S, Bagg W, Curtis E, Yelder J. The student narrative of undergoing academic difficulty and remediation in a medical programme: Indigenous Māori and Pacific Admission Scheme (MAPAS) and international student perspectives at the University of Auckland. *N Z Med J* 2022;135(1551):40-53.
9. Selva-Rodriguez A, Sanders J. Twelve tips for providing academic remediation to widening access learners in medical education. *Med Teach* 2023;45(10):1112-1117. <https://doi.org/10.1080/0142159X.2023.2216360>
10. Mittelman E, Ark R. To accept or decline academic remediation: What difference does it make? Medical students' perspective. *Med Teach* 2020;42(2):239. <https://doi.org/10.1080/0142159X.2019.1620197>
11. Mills LM, Boscardin C, Joyce EA, O'Sullivan P. Emotion in remediation: A scoping review of the medical education literature. *Med Educ* 2021;55(12):1350-1362. <https://doi.org/10.1111/medu.14605>

Received 14 October 2024. Accepted 19 January 2026.