Reviewer’s report

Title: A scoping review on Family Medicine in sub-Saharan Africa: Definition, practice and positioning in African health care systems

Version: 0 Date: 02 Sep 2019

Reviewer: Robert Mash

Reviewer's report:

Refer to the Prisma checklist for scoping reviews http://www.prisma-statement.org/Extensions/ScopingReviews. I used this in my review.

Issues of copyediting

The writing would benefit from a copyeditor as there are many grammatical errors.

Write about the work consistently in the past tense

Use abbreviations consistently once they have been introduced

Only capitalize proper nouns.

There is no space between the full stop and the citation - be consistent.

If you start a sentence with a number then put it in words.

Do not sometimes revert to a Harvard style of citation e.g. Moosa et al.

Abstract

Ensure the aim of the review is the same as the overall question presented in the article.

The methods are inadequately described. You should include more: eligibility criteria, sources of evidence, charting methods.

What are "perceived impact studies"?

Strengths and weaknesses were 'identified' - you would "explore" in a qualitative study.

I would refer to either a systematic review or a scoping review but not a "systematic scoping review".
The conclusion is too long and should be shortened to allow more space for the methods and results.

Introduction

Be careful to consistently focus on sub-Saharan Africa in the text and not switch between referring to Africa and sub-Saharan Africa.

I think the introduction may need to make a distinction between the discipline of family medicine, which may apply to more than one type of health professional (for example in SA family medicine also trains clinical associates, and the discipline also applies to medical doctors who might for example do a diploma) and the deployment of the family physician (a doctor with postgraduate training registered as a specialist in FM).

The introduction should also explain why a scoping review is necessary - have such reviews been done before or elsewhere? Explain why the review questions lend themselves to a scoping review approach.

Split the first sentence (line 1-2) into two. The one about the clinical focus of FM and the other about the larger picture contribution to equity etc.

Line 4, what does "this" refer to?

The assertion "this is obvious" for FPs and PHC providers, sounds a little too opinionated and no reference is given to support this statement.

Line 24, in this list of principles should co-ordination of care be included?

Line 31-32, Filling gaps is an issue, but placing FPs at district/primary hospitals is common and meeting a real skills gap at this level where no other specialists are located. A more balanced statement is maybe needed?

Line 32-33, FPs play a supervisory clinical role in all their placements in the DHS whether at the PHC level or DH level or even at the district level itself.

Line 47, cite the evidence for the first part of the sentence. Dr Chan's utterance cannot be regarded as strong evidence per se, although it is supportive.

Methods

Take the initial comments on the search strategy in lines page 4(60) and page 5 (1-2) to the section on search strategy.
Under study design, state if a protocol was followed and whether this can be accessed or was registered. Might also be a limitation?

The authors seem to confuse the concept of "search terms" and "search strings". Search terms refer to the words used in the search. Search strings refer to how these words or terms are put together with Boolean operators to design and perform the actual search.

Line25, did the first author review all the titles/abstracts in addition to the individual researchers or just the list of selected articles? Did she just double check that they were relevant and not duplicated?

Describe what you mean by snow-ball-ing.

It is not clear whether articles had to meet all 5 criteria (Table 1) to be included or just 1 of the 5 or some other combination? If all 5 then the selection would have been much smaller.

List somewhere all the data items extracted from the articles.

Table1: Did postgraduate degree include/exclude a fellowship, a diploma, a non-clinical Master's degree (MPhil), a PhD? Presumable the article must have included sub-Saharan Africa so (Must include at least one country from sub-Saharan Africa)? Articles from North Africa alone would not be excluded? Define what strengths and weaknesses refer to -the health system? Define SWOT?

Textbox 1: In SA GPs are seen as private practitioners in primary care. Should FPs also include that they should be registered as a specialist by the country's health council. For example a 2-year Diploma in SA would not make you a family physician. In West Africa the discipline presumably applied also to the undergraduate space?

Textbox 3: These are search strings and not search terms. It is not clear why the strings used different terms for family medicine and why these were not combined throughout i.e. (Family Practice OR Physicians OR Primary Care Physicians OR Family Physicians) AND… Strings 3 and 5 would then essentially be the same. Why was the term District Health System or District Health Services not included?

The argument for not having a flow diagram is not convincing. It sounds as if the individual researchers did not keep a record of the total number of articles found and excluded (with reasons) in each search, but this can easily be determined by repeating the search using the design to find out what the total number of articles was. The primary researcher would then know how many articles were received and what happened from then on. It may be better to have an incomplete flow chart than none at all.

Limitations of the methods are usually discussed in the discussion section of the article.

State in the methods whether any critical appraisal of the quality of articles was conducted or not.
Once the data was extracted describe the process followed to summarise and interpret the findings. I believe there was a workshop in Gauteng to assist with this. Other processes?

Results

Line 3, what regions are referred to here - African regions?

Line 15, were these literature reviews formal ones (i.e. systematic / scoping) or more expert/opinion based - please clarify.

Line 21, do not bring a definition of FM into the results from outside the review (this is from Wonca World). This could be include in the introduction and then discussed in relation to your findings in the discussion. What definitions arose from your review findings in SSAfrica? Same applies to Textbox 5.

Line 45, the way PG training is delivered and the implementation of FM in the HS do not necessarily correspond, particularly in the early days of training. For example training may happen in regional hospitals out of necessity while the FPs are placed in the primary or district hospitals when trained. This is typical of SA, Botswana and probably Zimbabwe, as they got started. I think therefore it is unhelpful to conflate how training is organized with how FPs are then placed in the health system after training. These two issues should be separated.

Line 53, it would be helpful to articulate a clear range of options or typology of models, rather than just saying there is great variation.

Page 7, line 1. This split of FM training into urban and rural pathways is mentioned. Is this however what is happening in SSA? SA decided not to do this. I am not aware of other countries actually developing separate training programmes. Please clarify. The assertion that urban training would be similar to Europe also needs interrogation. In SA FPs in urban areas also work in district hospitals and lead large multidisciplinary teams in PHC - not at all like Europe.

Line 17, FM in SA focused on DH as well as PHC teams.

Key point here surely is that there is limited evidence and it almost all comes from SA.

Discuss the findings later - see use of reference 46 in line 41.

Line 44, this was a cross-sectional analytical study comparing groups (exposed and unexposed) and not a descriptive survey.

Page 8, line 1. This paragraph appears to re-iterate the work of Von Pressentin that was already presented above.

Line 5, one of the explanations given for the perverse finding on PHC was that FPs were deployed at larger and less functional health centres and this acted as a confounder.
Line 29, which countries were "less obvious", maybe also mention one or two examples.

Key questions 4 and 5 also appear to look at the implementation of FM (where are FPs deployed and what do they do in the HS). How do these results differ from question 1 (different ways of implementing)? Would it make sense to thematically combine these findings in some way?

Line 60, again more critical synthesis of the evidence would be helpful. Yes they are found at all these different levels, but what is the emphasis in different countries and why?

Page 9, line 19. Role of consultant is to PHC team and to DH team.

Line 20, usually capacity builder refers to the team members (non-students and would include nurses, clinical associates and even CHWs), while clinical trainer to the students (so this would include residents or registrars who are formal students).

Line 23, in SA a distinction is made between clinical governance (with a focus on clinical quality and safety) and corporate governance (with a focus on management of supply chain, human resources, finances etc.). So management and clinical governance may not be seen as synonymous.

Line 24, they would most likely engage with the PHC teams (including the CHWs) to support COPC and through or with them to communities - not directly or alone.

The placement as clinical managers, CEOs, superintendents, district managers etc. is relatively common. Family physicians end up taking these posts and maybe their generalist background and training prepares them. This is not however what they are trained for or how the HS envisages FP posts. It maybe that these are the posts available. This maybe needs a little more explanation.

Table 2:

* The table needs to more rigorously differentiate between column 3 (maybe this is the roles of the FP) and 4 (maybe this is the positioning in the HS)?

* SA: I would have thought the 6 roles mentioned elsewhere should feature in cell 3. Cell 4 should be clear that most are deployed at DH, many at PHC, many in District Clinical Specialist Teams (a group of specialists functioning throughout the districts with a focus on maternal and child care), some also in regional/tertiary hospitals. Also in private GP.

* You need to be clear what you mean by "district level" or "district health care". This could imply at the district/primary hospital OR at the level of the district management team (such as district FPs or DCST members) overlooking the whole district.

* Nigeria: started training 1970 and first graduates 1985? The concept of "private/rural practice" is not clear.
* **Uganda**: what do you mean by "general hospitals"

* **Botswana**: My understanding is that FPs are being deployed at primary hospitals and not in PHC per se. They do have their first graduates.

* **Ethiopia**: how is a district hospital at the core of PHC delivery?

Table 4:

* The table should include something about the type of evidence generated by each paper in relation to the review questions. The aim / purpose of each paper?

Figure 2

* The category "general" seems out of place.

Figure 3:

* What was the date of the review (needs to be stated in the methods)? Is this why 2018 so few?

Discussion

Discussion should start with a summary of the review findings - the concepts, themes and types of evidence available.

There is a tendency to discuss findings that are not well articulated in the results section. For example "social accountable responsiveness" and "adaptation of infrastructure" are not clearly seen in the results. The authors clearly have strong views and background in family medicine, but as reviewers and researchers need to focus on what this review actually finds in the discussion.

An aspect of the findings and discussion that is not yet seen is the way family medicine develops and changes over time in countries. The district hospital vs PHC deployment is presented as a dichotomy or a choice to be made in the results, but may be a transitional process. For example health systems seem to recognize the value of FPs at the district or primary hospital early on and initial posts are made here, once this is successful, then posts start to be created in primary care. SA was like this. In rural areas the DH PHC platform often function as a unit with outreach and support. The discussion could be more nuanced in exploring this issue. Training similarly evolves over time and moves from regional hospitals to district hospitals to primary care. Can you see these issues in the studies?
Page 10, lines 14-15, unclear and confusing sentence. "FPs working in health centres…"

Line 22, not sure about the emphasis here on rural. In SA the urban areas often have a stronger deployment of FPs into PHC as health centres are larger.

Line 45, how do the points raised in this paragraph connect to the findings of the review?

End the discussion with a more in depth discussion of the knowledge gaps identified and the key research that needs to be done.

Conclusions

Try and focus the conclusions more directly to conclude on the questions asked in the review. New issues should be avoided (e.g. globalization, pragmatism jeopardizing core values) if not developed earlier.

A brief clear statement on the knowledge gap(s) identified and to which future research should be addressed is needed.

Funding

Funding was received from Stellenbosch University to workshop the findings in Gauteng and from Ariadne Labs to present the findings in Liverpool. This should be acknowledged. This aspect of the process should also be described in the methods.

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I have prior knowledge of this review as it was part of an initiative by Primafamed that I led. I have some interest in the review being published therefore. I did not participate in the review, or the reporting and this is the first detailed feedback I have given on the final manuscript.

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