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Does public health fieldwork attachment for doctorate student beneficial? a qualitative exploratory evaluation

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Abstract

Fieldwork attachment allows student to explore thoughts, feelings, developing self-awareness and fresh insights related to public health knowledge. Practical experience through reflection is as important as theory in fields. Habit of critical reflection prepares students as future health professionals. The aim of this study was to explore learning experience within the fieldwork attachment among the Doctor of Public Health students in achieving stated learning objectives. A qualitative study based on a student’s fieldwork, reflection report and supervisor’s report on fieldwork attachment in third semester was explored. Descriptive analysis was performed. Students reported that they were in general satisfied with the posting. It helped them to increase their motivation as future health manager. Few have different points of view in achieving learning objectives: the field attachment is tiring or insufficient. Most of the students found it was beneficial and enjoyable. Students have come back with various meaningful learning and positive attitudes. The outcomes were grouped as: (1) student satisfaction and perceived usefulness, (2) ability to practice strategic planning in health programme, (3) length of attachment and (4) availability of field supervisor to coordinate, giving guidance and barrier in communication. In overall, students have benefitted from the fieldwork attachment but the experience gained has not as deep and wide as what had been expected due to time limitation and weakness in coordination.

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Keywords: Fieldwork attachment; public health training; reflective writing; UKM

1. Introduction

Public health fieldwork attachment is a way to apply educational theory into practice. Meeting program outcome expectation is important in the process of evaluation and assessment. Doctor of Public Health (DrPH) is a 3 year program in Universiti Kebangsaan Malaysia (UKM) and has been offered since 1999. After 10 years of implementation, this program has attracting good attention from the Ministry of Health (MOH) Malaysia by sending their personnel to enroll in DrPH program and was sponsored by Ministry of Higher Education (MOHE) as a 1+3 scholarship contract. The students joint the program as Master of Public Health candidates for 1 year duration and continue enrolling in DrPH program after certification with a good grade and meeting the entrance criteria.

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Fieldwork attachment is one of its curriculum components in meeting the program outcome. Before starting fieldwork attachment student have to complete with satisfactorily coursework component result for related to public health in first and second semester. With this basic knowledge in public health, students will precede with fieldwork attachment in third semester. Fieldwork attachment is aimed to give the student a real exposure which is in line with experiential learning concept. Maarof (2007) in his study found that the ability to connect theory and practice as well as to develop reliable teaching knowledge depends on the ability to reflect on practice. It had shown that level of reflective thinking among student was low due to lack of experience. Leadership and working as a team are important aspects in public health specialist. Inculcating leadership and teamwork elements in students training has been recommended as important (Skochelak, 2010). The program outcome is to develop a cadre of public health student with advanced public health knowledge and skills to work with the MOH. This exposure will prepare them to work efficiently once graduated in the development of appropriate policies and practice related to public health issues. Gordon et al., (2011) in their study stated that students valued the study skills that they had acquired in the process of achieving their previous qualifications. They also thought that life and work experience had been crucial in preparing them for further study. The study also noted that support is needed to succeed and it includes knowledgeable and sympathetic tutors, good quality materials and support from family and friends.

The fieldwork attachment is designed to offer training to students in applying public health knowledge to practice. Students work in the area of their sub specialization where senior staff members at the posting sites take roles and responsibilities in providing supervision. Students must complete a required coursework credit unit and passed the comprehensive examination. They should also have the ability to apply their skills and knowledge in a professional setting successfully. The supervision of the fieldwork experience is a joint effort between the fieldwork supervisor and the students’ academic supervisor. It is a structured system which includes an inter-agency agreement e.g. UKM with MOH or ExxonMobil or others, specifying learning objectives under which the student may participate in the fieldwork activities. Written assignments prepared by each student during the fieldwork postings should describe their experience and the evaluations of the student’s assignments were completed jointly by the site supervisors and students.

In order to assess their skills gained through experiential learning, proper tool for assessment need to be generated. Green (1999) stated that in assessment, supervisor /teacher is supposed to sit with the learner. He described that learning skills through experiential learning as something need to be done with students and not to students. Reflection on the experiential learning during fieldwork attachment is one of the assessment tools that are being used. Reflective writing is largely concerns with looking back - but with a view to the future. Wehbi and Straka (2011) argued that participatory reflection activities revalue student’s knowledge and favor their active involvement in the educational process. Using various sources of evidence converging on the same set of facts or findings gives strength and richness to the results of the assessment. Harlen et al., (1992) had stated that assessment in education is the process of gathering, interpreting, recording and using information about student’s responses to an educational task. According to Bloom’s taxonomy, educational process can be classified into 3 domains: cognitive, affective and psychomotor (Bloom, 1956). During fieldwork attachment these 3 domains can be achieved.

2. Methodology

A qualitative case study on fieldwork attachment for DrPH students in third semester was conducted to assess the students’ experiential learning in meeting programme learning objectives. The exploration was based on program learning objectives as follows:

- To identify health priorities in a community.
- To critically analyze and interpret data.
- To display innovative technical skills in managing programmes in community health and specific specialty.
- To lead and collaborate with others in community health in general and for a specific specialty.
- To display ability to communicate with peers, scholar community and general public related area of specialty.
- To display ability to supervise, monitor and train professionals in community health in general and area of specialty.
This study adopted a double-method approach in data collection. The students’ fieldwork reports together with the reflective writing assignments based on experiential learning and supervisors’ feedback assessment (field supervisor and academic supervisor) forms of their performance were analysed.

3. Result

The result of qualitative approach study on fieldwork attachment evaluation for DrPH students during Semester 3 was explored. All students (n=16) from the first cohort of 1+3 programme sponsored by MOHE for DrPH program under UKM were included in the study. Their fieldwork attachment was done in August 2010 – January 2011. Data was obtained based on their reports and supervisors’ feedback assessment forms. Four themes had been identified and described as the framework model (Figure 1). These themes were referred as factors contributing to the achievement of learning objectives for the fieldwork attachment.

Figure 1. Framework model describing themes contributing to the achievement of learning objectives for fieldwork attachment

3.1 Theme 1: Perceived usefulness and student satisfaction

Overall, the student’s perceived the fieldwork attachment as useful and satisfactory. Descriptive analysis based on report submitted was explored according to stated learning objectives for the attachment. Table 1 showed that attachment had a weakness in achieving three out of the six listed learning objectives which are: (1) student’s ability to supervise, monitor and train professionals in community health in general and areas of specialty during posting; (2) Ability for students to display innovative technical skills in managing programmes in community health and specific specialty was not met and (3) to lead and collaborate with others in community health in general and for a specific specialty. The reasons for not being able to achieve these learning objectives were stated in Table 2.
Table 1. Descriptive analysis based on students’ assessment

<table>
<thead>
<tr>
<th>Programme learning objective</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>To identify health priorities in a community</td>
<td>All students described their activities in prioritizing public health issues and involvement in program monitoring and evaluation as satisfactory.</td>
</tr>
<tr>
<td>To analyse critically and interpret data sufficiently</td>
<td>Majority 9 out of 17 students managed to use data at the posting area and had the opportunity to help in analysing and making reports.</td>
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<td></td>
<td>The remaining students did not state their experiences on this component in their reports. However, they announced that, they were briefed by their field supervisors on the documentation process of activities/ programs.</td>
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<tr>
<td>To display innovative technical skills in managing programmes in community health and specific specialty</td>
<td>Four out of 17 students mentioned that they had the opportunities to help in handling program activity during their posting and construct problem solving.</td>
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<tr>
<td>To lead and collaborate with others in community health in general and for a specific specialty</td>
<td>Only two out of 17 students had an opportunity to learn by leading a team by collaborating with others during their posting.</td>
</tr>
<tr>
<td>To display ability to communicate with peers, scholar community and general the public related area of specialty</td>
<td>All of the students admitted that they were able to communicate with peers and other public health specialist.</td>
</tr>
<tr>
<td>To display ability to supervise, monitor and train professionals in public health in general and area of specialty in public health.</td>
<td>None have the students had an opportunity to learn public health skills during posting.</td>
</tr>
</tbody>
</table>

Table 2. Students’ feedback on fieldwork attachment posting

<table>
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<tr>
<th>Items / themes assessed</th>
<th>Overall comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of posting</td>
<td>All students agreed that 5 months field work attachment was not enough for them to have skills related to all public health areas.</td>
</tr>
<tr>
<td>Coverage of care</td>
<td>Ten students managed to be placed at all level from district, state to national level.</td>
</tr>
<tr>
<td>Coverage of subspecialisation / area of research focus</td>
<td>All students were not able to obtained fieldwork training for all 5 main subspecialisations in public health. Students also showed that they were unable to practice the theory that they have obtained in the classroom during fieldwork posting. They acknowledged their need to expand and go deeper into public health knowledge.</td>
</tr>
<tr>
<td>Communication</td>
<td>Majority (12 out of 17 students) mentioned that they had good cooperation from their field supervisors. Two of them did mention that during their posting, they did not have a good communication with their own field supervisors. However, they managed to obtain their learning scopes through</td>
</tr>
</tbody>
</table>
3.2 Theme 2: Strong basic knowledge on strategic planning of the program (Opportunity to develop skills)

The key objective of the fieldwork attachment was to provide opportunities for the students to gain public health job experience using MOH facilities or other agencies. Students admitted that they learned and practiced skills in handling public health issues during working especially issues related to health program planning. All students have been reported by their field supervisors as having a satisfactory attendance and participation. Reports from field supervisors stated that students have performed their task given to them that contributed to significant opportunities to work as a part of a dynamic team.

3.3 Theme 3: Duration of attachment

With contact hours of 5 days a week, for 5 months, students managed to be posted to at least to their subspecialisation field area. However, because of time constraint, the depth and width of each posting was reported as being unable to fulfil the learning objectives stated effectively. In addition, in some centres certain services have to be prioritized although public health program or activities were carried out as an ongoing project. This explains why to the experiential learning was not being able to be practice in all scopes under the public health program.

3.4 Theme 4: Availability of field supervisor to coordinate and give guidance and barrier in communication

Active participation by students during posting was not observed in some facilities. Reasons given were poor coordination and lack of supervision due to job priority. At the end of the posting, each student completed written assignments reflecting on the achievement and challenges encountered during their fieldwork attachment posting. The site supervisor completed the feedback assessment forms based on the students’ performance. During the fieldwork, the students and field supervisors, met to discuss the students’ experience and how it influences the students’ career goals. The assessment required student to complete all tasks given.

4. Discussion

Exploring students’ learning experience during fieldwork attachment in relation to program learning objectives through assessment reports and reflective writing report was a challenge. Four themes were determined in this study that affects their learning experience. A study done by Wilkinson and Harris (2002) also described their difficulty doing fieldwork attachment, which may be manifested by not getting involved with the health care team, poor time management and occasionally by interpersonal difficulties or not recognising limits. Strong basic knowledge on public health in all subspecialization and previous public health exposure are important criteria related to fieldwork training. Before enrolling into the programme, these criteria may help in boosting up student commitment and participation to strengthen their skills. Wilkinson and Harris (2002) reported that taking on a professional role requires the ability to perform clinical task, including diagnostic ability, which is built on a foundation of basic knowledge and clinical skills. These can be influenced by personal factors such as rigidity, motivation and shyness.

Billett (2001) stated that workplace learning environments and experiences as 'informal' and 'informal learning' are important in the development of pedagogy. It occurs in workplaces with constrains understanding about how learning occurs through work. Illeris (2011) stated that workplace pedagogical formats are intended to produce studious cogs. It takes punctilious care in performing their requisite duties. Workplace environment that supports learning aimed for continuity of practice, also often has inherently pedagogical qualities (Maarof, 2007).

Appropriate coordination and giving guidance are valuable connection between supervisor and student. Sheehan et al., (2005) stated that learners needed to feel valued. The supervisors need to be approachable which will help in creating a conducive environment. This will help learners to feel invited to participate and help them believe that supervisors would value their contributions. The study also showed that teamwork and communication aspects (e.g., understand the politics of people) seem to receive less attention. Other factors that affect performance during
fieldwork attachment were appropriate coordination as the number of people that might be attached to a particular public health setting has an effect on the learning process. The range of experience starting from planning, monitoring to evaluation of public health programs opportunities likely to arise in a particular setting. Task of the team that individuals will be participating in with will also be determined. Barriers to participate and learn were noted mainly due to insufficient time and/or access to the supervisor. This theme is significant because a key concern raised was that the students can easily feel marginalized if they lack confidence to persist and engage with the fieldwork staffs and their supervisors. Having too many people on the team limits the amount of students and supervisors contact duration and a form of hierarchy of learners could develop that may be hard to overcome unless the trainees are assertive. Effectiveness of a range of teaching methods in continuing medical education can be enhanced in small-group discussions with peers.

During the short attachment period, the field supervisors were given acknowledgement by our department for allowing our students to do fieldwork attachment. There was no specific contract or incentive given for the supervision. This could be one of the problems that can lead to poor coordination and cooperation. Bilett (2002), in his study reported that attention would be paid not only to the performance of the trainees in relation to activities conducted but also to make time for interactions between team members, thus highlighting the significance of co-participation in workplace learning.

Perceived usefulness of fieldwork attachment to complement basic knowledge learned in class was reported in this study. However, barrier in communication inhibits active learning experience. Study done by Onuoha (1996) stated that health professional learners asked about the attributes they desire in a clinical supervisor and they identified modelling competent practice, demonstrating the role, planning learning experiences, explaining own expectations of the supervisor, giving feedbacks, allowing the students some degree of independence, and encouraging self-evaluation through questioning as most favourable attributes. Innovative teaching methods may motivate students in learning as they are able to feel their skills improved as reported in a study done earlier on knowledge translation.

Limitation of this study was the ability of the students to reflect on their learning experience. The results obtained cannot be generalised as the analysis depends largely on the individual assessment of the contents and themes explored in the report. Boud (1999) stated that reflection can be a self-directed and private activity. The cognitive process that can be modelled and promoted by supervisors will depend on many factors: duration of fieldwork, personality, coordination between parties, understanding and appropriate areas of the fieldwork attachment should be learned.

5. Conclusion

This study offers an exploratory insight into the commitment level of students and field supervisors during fieldwork posting. Fieldwork attachment is learning on the job, getting opportunities to gain experience and become competent. It helps to contribute in the development of the student’s awareness of standards and best practice. In overall, the study was able to evaluate the fieldwork attachment in achieving program learning objectives. The strength was more in public health skills related to program monitoring and evaluation. It is able to analyse various hidden and explicit educational goals. Learning by experience cannot be limited to only learners’ cognitive learning features as other factors such as attitudes and behaviours also have an effect on constructing their experiences.

6. Recommendation

The programme coordinator needs to conduct site visits, participates in and gathers written evaluations. This will provide the faculty with updates on the effectiveness of the fieldwork attachment and whether the academic program has adequately prepared students to function as professionals in public health. How well students perform in their fieldwork attachment gives the department very useful assessment information on how effective is the program in preparing the students to function professionally. Initiation of tasks can form the basis of orientation to an attachment. The field supervisor needs to orientate the learner as a member of a team as it helps students to participate and initiate tasks including getting to know the team, the preferences of its members, the norms/practices and the fieldwork attachment’s scope of expectations.
Practice point:

- Strong coordination between the programme coordinator and fieldwork supervisor need to be set prior to student placement.
- Duration of the fieldwork attachment should be prolonged to cover main scopes under public health.
- Assessment can be documented as quantitative approach for standardization.
- Previous working experience prior to enrolment helps in forming engagement with fieldwork supervisor.

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References