CENTRAL UNIVERSITY OF KERALA DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE

Minutes of the Board of Studies meeting held on July 8, 2020

1. The 2nd board of studies meeting for the Department of Public Health and Community Medicine was held on July 8th 2020 from 10 am to 1pm. The meeting was attended by the following members.

SI.	Name of the expert	Capacity	Designation & Affiliation				
1	Dr Elezebeth Mathews	Chairperson	HOD (In-charge), DPH&CM,				
			CUK				
2	Prof. (Dr.) KR	Member	Professor, DPH&CM, CUK				
	Thankappan						
3	Assoc. Prof. Dr.	Member	Dean, School of Medicine &				
	Rajendra Pilankatta		Public Health, CUK				
4.	Dr Sibasis Hense	Member	Asst. Professor, DPH&CM,				
			CUK				
5	Prof. (Dr.) Raman Kutty	Member	Epidemiologist and Data				
	V		Science Consultant, Amala				
			Institute of Medical Sciences,				
			Thrissur, Kerala				
6	Prof. (Dr.) Unnikrishnan	Member	Associate Dean and Professor				
	В		Department of Community				
			Medicine, Kasturba Medical				
			College, Mangalore MAHE.				

7	Dr. Shailendra Kumar B	Member	Senior Vice President - Public
	Hegde		Health Innovations at Piramal
			Swasthya, Hydearabad (India)
8.	Dr. C.K. Jagadeesan	Member	State Nodal Officer of
			ARDRAM Mission and Deputy
			Director, Directorate of Health
			Services, Govt. of Kerala
9.	Dr. K Vijayakumar	Member	Professor, Dept. of Community
			Medicine, Amrita Institute of
			Medical Sciences, Kochi.
10.	Mr. Prakash Babu	Faculty	Department of Public Health
	Kodali	member	and Community Medicine,
			Central University of Kerala
11	Ms. Jayalakshmi	Faculty	Department of Public Health
	Rajeev	Member	and Community Medicine,
			Central University of Kerala

2. The Department proposed for a change in the eligibility criteria for admission to the MPH program due to the increasing number of applications from life sciences and biomedical stream. Faculty members envisioned that if there are more applications with relaxed eligibility criteria, the competition to the program will be tougher and best students can be selected to the program.

Current Eligibility criteria: MBBS/BDS/B.Sc. Nursing (4 years)/any Branch of Engineering (4 years)/ B.Pharma/Bachelor of Phototherapy/ B. AYUSH/ B.Vety/B.V.Sc./ Master in Social Work/ Economics/ Policy Science/ Sociology/Nutrition/ Development Economics/ Public Administration/Psychology/ Law. No upper age limits.

Proposed eligibility criteria: Bachelor's degree in the following disciplines are eligible: Medicine / AYUSH / Dentistry / Veterinary Sciences/ Nursing/ Allied Health Sciences / Life Sciences / Statistics / Biostatistics / Demography / Population Studies / Nutrition / Sociology /

Psychology / Anthropology / Social Work/ Engineering/ Bio-medical sciences/ Law/ Management Studies/ Public Policy & Administration/ Economics. No upper age limits.

The members of the Board of Studies deliberated on the eligibility criteria proposed by the department and approved the same.

3. The MPH curriculum was revised as per the curriculum promulgated by the Ministry of Health and Family Welfare, adhering to the CBCS guidelines of University Grants Commission. The revised curriculum has also incorporated value addition courses from Massive Open Online Courses from SWAYAM program of Government of India as electives.

The revised MPH programme consists of 72 Credits, of which 59 and 13 credits are offered through core and elective courses (including MOOC courses) respectively. **Semester- I** consist of 20 credits; **Semester-II** consist of 20 Credits; **Semester-III** consist of 18 Credits; and **Semester-IV** consist of 14 credits.

The revised program structure was approved by the members.

- 4. Dr. Vijayakumar recommended that disaster management be included in Principles of Practices of Public Health course and the same has been incorporated.
- 5. Dr. Jagadeesan suggested the need to include health systems based internship to students to get them acquainted with the functioning of the health system. He further suggested that the course on Health Promotion methods and approaches shall also include the approaches in decentralized system. The same has been incorporated.
- 6. The courses and the syllabi was reviewed and approved by the members.

Semester: II Core Course

6. Course Code & Title: MPC 52 01 & Research Methodology in Health Sciences Credits: 4

Course objectives: The objective of this course is to equip students in developing an understanding of different methodological approaches in undertaking a research in health sciences with focus on public health.

Course outcomes: On successful completion of this course, students will be able to:

- 1. Learn different paradigms and epistemological stands of conducting empirical research.
- 2. Identify an appropriate topic for research and develop research questions, objectives and hypotheses.
- 3. Learn how to undertake a systematic literature review in general and for the MPH dissertation in particular.
- 4. Apply the concepts of research methods in developing data collection tools and techniques.
- 5. Develop a research proposal employing quantitative and qualitative approaches.

This is an employment focussed skill development course. On successful completion of course, the students shall be skilled in quantitative and qualitative research methods and will be able to use NVivo for qualitative analysis.

Teaching methods: This course will be delivered using a variety of methods and modalities such as interactive classroom and online lectures, self-study, case studies, written assignment, class room exercises using computers/software, quiz, field visit, group work, field survey, class room presentations in groups etc.

Units and Topics	Teaching Methods				ods			Mandatory Readings	
Unit-I: Quantitative Research Methods									
	$ \mathbf{L} $	FW	FV	CS	GW	SS	SP	P	

Objectives of the course and the need for undertaking an independent research project for the MPH programme	X	X		
Literature review including various style of referencing, method of reviewing literature and how this has to be reproduced in the dissertation or a research paper with appropriate citation	X	X		Suresh, N., & Thankappan, K.R, (2019). Gender differences and barriers women face in relation to accessing type 2 diabetes care - A Systematic Review. <i>Indian Journal of Public Health</i> , <i>63</i> , 65–72. https://doi.org/10.4103/ijph.IJPH_26_18.
Choosing a research topic in general and specifically for the MPH dissertation Framing research questions and objectives of the study		X		Hall, N., & Kothari, R. (1999). Research Fundamentals: IV. Choosing a Research Design <i>Acad Emerg Med</i> , 6(1), 67–74. https://doi.org/10.1111/j.1553-2712.1999.tb00097.x
Identification of variables, defining each variable and operationalizing them	X	X	X	Mini, G., Sarma, P., & Thankappan, K.,R. (2019). Cluster Randomised Controlled Trial of Behavioural Intervention Program: A Study Protocol for Control of Hypertension Among Teachers in Schools in Kerala (CHATS-K), India. <i>BMC Public Health</i> , 19(1), 1718. https://doi.org/10.1186/s12889-019-8082-5
Various study designs including cross sectional, case control, cohort and randomized controlled trials	X	X		Riddell, M. A., Joshi, R., & Oldenburg, B et al (2016). Cluster Randomised Feasibility Trial to Improve the Control of Hypertension In Rural India (CHIRI): A Study Protocol . <i>BMJ Open</i> , 6(10), e012404. https://doi.org/10.1136/bmjopen-2016-012404.
Different methods of data collection, Questionnaire method, interview schedules, and some physical measurements like weight, height, and waist circumference.	X	X	X	Patra, L., Mini, G. K., Mathews, E., & Thankappan, K.,R. (2015). Doctors' Self-Reported Physical Activity, Their Counselling Practices and Their Correlates in Urban Trivandrum, South India: Should a Full-Service Doctor Be a Physically Active Doctor? . British Journal of Sports Medicine, 49(6), 413–416. https://doi.org/10.1136/bjsports-2012-091995

Organizational aspects of field survey, logistics of field survey organization, training of staff transportation etc.	X	X		Thankappan, K. R., Sivasankaran, S., Mini, G. K., Daivadanam, M., Sarma, P. S., & Khader, S. A. (2013). Impact of a Community Based Intervention Program on Awareness, Treatment and Control of Hypertension in a Rural Panchayat, Kerala, India. <i>Indian Heart Journal</i> , 65(5), 504–509. https://doi.org/10.1016/j.ihj.2013.08.023
Estimating sample size for different study designs	X	X	X	Vishnu, N., Mini, G. K., & Thankappan, K. R. (2017). Complementary and Alternative Medicine Use by Diabetes Patients in Kerala, India. <i>Global Health Epidemiology and Genomics</i> , 15(2), e6. https://doi.org/10.1017/gheg.2017.6
Sample selection procedure and sample frame	X	X	X	As above
Development of a questionnaire and interview schedule and the difference between the two, translation and back translation of the schedule/questionnaire Pilot testing of instrument/tool for the study	X	X	X	Sailesh, M., Pradeepkumar, A. S., Thresia, C. U., & Thankappan, K. R et al. (2006). Tobacco Use Among Medical Professionals in Kerala, India: The Need for Enhanced Tobacco Cessation and Control Efforts. <i>Addictive Behaviours</i> , 31(12), 2313–2318.
Scales of measurement, reliability and validity and the difference between the two. Organization of data sheets, manual checking of data sheets, grouping them, storage and transportation,		X		Mathews, E., Salvo, D., Sarma, P., Thankappan, K., & Pratt, M. (2016). Adapting and Validating the Global Physical Activity Questionnaire (GPAQ) for Trivandrum, India, 2013. <i>Preventing Chronic</i>
Data entry using excel and SPSS, data cleaning	X	 X	X	Diseases, 13, E53.
Univariate, bivariate, and multivariate analysis	X	X	X	A
Writing a research report with executive summary and a research article of scientific journal with an abstract.	X	X		Aziz, Z., Mathews, E., Absetz, P., & Sathish, T et al. (2018). A Group-Based Lifestyle Intervention for Diabetes Prevention in Low- And Middle-Income Country: Implementation Evaluation of the Kerala Diabetes Prevention Program. <i>Implementation Science</i> , 13(1), 97.

Unit-II: Qualitative Research Methods						
Type of research approaches – Induction and deduction approaches, elements of research paradigm – Ontology, epistemology, axiology and ethics and research paradigm – Positivist, postpositivist and pragmatism.	X			X		Al-Saadi, H. (2014). Demystifying Ontology and Epistemology in research methods. <i>Research Gate</i> , <i>I</i> (1), 1-10. Noble, H., & Smith, J. (2014). Qualitative data analysis: a practical example. <i>Evidence-Based</i>
Qualitative design: Case-study, ethnography, participant's observation, and phenomenology Qualitative data collection techniques: In-depth interviews and focus group discussions. Qualitative data collection tools: In-depth interview and focus discussion guides Sampling techniques and sample size in Qualitative research.	X	X		X		Nursing, 17(1), 2-3. Devers, K., & Frankel, R. (2000). Study design in qualitative research: Sampling and data collection strategies. Education for Health, 13(2), 263-271. Giddings, L. (2003). Rigour and trustworthiness in qualitative research. Qualitative Research Methods course, Auckland University of Technology, Auckland.
Mixed-method design: Sequential and concurrent designs and data triangulation. Type of qualitative data analysis approaches: Framework approach (thematic analysis), quasistatistical (content analysis), Interpretative approach (phenomenological analysis and grounded theory) and Socio-linguistic approach (discourse analysis). Rigour and trustworthiness of qualitative research – Four techniques 1.) Credibility, transferability, dependability and confirmability.	X		X	X X	X	Östlund, U., Kidd, L., Wengström, Y., & Rowa-Dewar, N. (2011). Combining qualitative and quantitative research within mixed method research designs: a methodological review. International Journal of Nursing Studies, 48(3), 369-383. Kitzinger, J. (1995). Qualitative research: introducing focus groups. BMJ, 311(7000), 299-302. Caracelli, V. J., & Greene, J. C. (1993). Data analysis
Demonstration of textual data analysis using Nvivo-7.5 including coding, generative patterns and developing sub-themes and sub-themes.	X			X	X	strategies for mixed-method evaluation designs. Educational evaluation and policy analysis, 15(2), 195-207. Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. Qualitative psychology: A practical guide to research methods, 222-248.

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					Saldaña, J. (2015). The coding manual for qualitative
					researchers. Sage Publications.

L- Lecture; FW- Field work; FV - Field Visit; CS - Case study; GW- Group work; SS- Self-study; SP- Seminar presentation; P-Practical

Evaluation:

As per CBCS guidelines, this course will be evaluated for 100 marks with a Continuous Evaluation (CA) component of 40 marks and End-Semester Evaluation (ESA) component of 60 marks.

Additional readings:

- 1. Bryman, A. (2016). Social research methods. Oxford university press.
- 2. Maxwell, J. A. (2008). Designing a qualitative study. The SAGE handbook of applied social research methods, 2, 214-253.
- 3. Rehman, A. A., & Alharthi, K. (2016). An introduction to research paradigms. International Journal of Educational Investigations, 3(8), 51-59.
- 4. Sandelowski, M. (1995). Qualitative analysis: What it is and how to begin. Research in Nursing & Health, 18(4), 371-375.
- 5. Liamputtong, P. (2009). Qualitative data analysis: conceptual and practical considerations. Health Promotion Journal of Australia, 20(2), 133-139.
- 6. Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. Nurse Researcher (through 2013), 12(1), 7.
- 7. Maxwell, J. A. (2010). Using numbers in qualitative research. Qualitative inquiry, 16(6), 475-482.
- 8. Minichiello, V., Aroni, R., & Hays, T. N. (2008). In-depth interviewing: Principles, techniques, analysis. Pearson Education Australia.